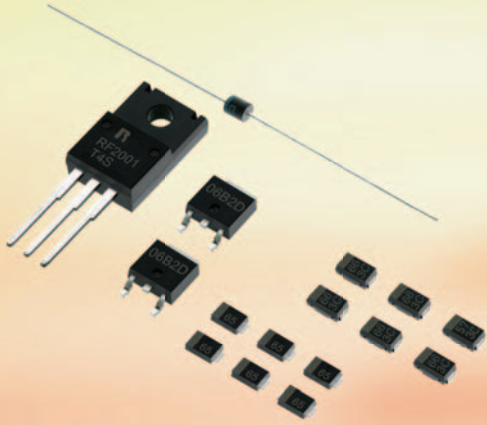




Product Catalog

2008-2nd



Zener Diodes

Schottky Barrier Diodes

Discretes

Excellence in Electronics

ROHM

www.rohm.com

Zener Diodes

• 2-terminal (single) Zener Diodes

A wide variety of packages is available – beginning with the world’s first 0603 sized (GMD2) package – in abundant quantities for use in consumer, manufacturing, and automotive applications.

• Low-capacitance Zener Diodes

Utilization of a proprietary device structure results in ultra-low capacitance (Typ: 1pF) – ideal for ESD surge protection on high-speed communications lines, including USB2.0.

• Bi-Directional Zener Diodes

RSB series Bi-Directional Zener diodes absorb forward and backward surges in signal lines of all types, from mobile phones, PCs and other consumer devices to automotive products, all in a single package that’s ideal for high-density mounting.

Schottky Barrier Diodes

• Schottky Barrier Diodes RSX series

The RSX series utilizes proprietary precision processing and device technologies for low V_F and I_R . ROHM products command a significant share of the market – a testament to their high-efficiency, low-loss, high-reliability design.

• Schottky Barrier Diodes RB series

The RB series is by far the most widely used and mass produced Schottky Barrier Diode series for consumer electronics as well as industrial and automotive applications. Both surface mount and axial packages are available. ROHM offers wide variety range of products from GMD2 to TO220.

CONTENTS

Zener Diode Product Lineup	.....	3
2-Terminal (single) Zener Diodes	.....	5
Compact, High Reliability 1W Constant Voltage Diodes	.....	6
Low capacitance Zener Diodes	.....	7
Bi-Directional Zener Diodes	.....	8
Schottky Barrier Diode Lineup	.....	9
High Efficiency, High Reliability Surface Mount Type	.....	11
World’s smallest* package : 0603 GMD2	.....	12
Small Signal Type Schottky Barrier Diodes	.....	13
Middle Power Schottky Barrier Diodes	.....	15
Power Type-Includes High Efficiency, High Reliability Leaded Units	.....	17
Dimensions	.....	18

* June 2008 ROHM survey.

Zener Diode Product Lineup

2-Terminal (Single) 4-Terminal (Dual) Zener Diodes

Package	Surface Mount Type											
	0603 size GMD2		1006 size VMN2		1406 size VMD2		1608 size EMD2 (SOD-523)		1712 size UMD2 (SOD-323)		1913 size TUMD2	
Equivalent Circuit Diagram												
Series name	GDZ series		CDZ series		VDZ series		EDZ series		UDZ S series		TDZ series	
Power (mW)	100		100		100		150		200		500	
Package symbol	T2R		T2R		T2R		TE61		TE-17		TR	
Electrical Characteristics (Ta=25°C)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)
3.6B	3.6	—	—	3.600 to 3.845	5	3.600 to 3.845	5	3.600 to 3.845	5	3.6	—	—
3.9B	3.9	3.740 to 4.160	5	3.89 to 4.16	5	3.89 to 4.16	5	3.89 to 4.16	5	3.9	—	—
4.3B	4.3	—	—	4.17 to 4.43	5	4.17 to 4.43	5	4.17 to 4.43	5	4.3	—	—
4.7B	4.7	4.420 to 4.900	5	4.55 to 4.75	5	4.55 to 4.75	5	4.55 to 4.75	5	4.7	—	—
5.1B	5.1	4.840 to 5.370	5	4.98 to 5.20	5	4.98 to 5.20	5	4.98 to 5.20	5	5.1	4.600 to 5.600	10
5.6B	5.6	5.310 to 5.920	5	5.49 to 5.73	5	5.49 to 5.73	5	5.49 to 5.73	5	5.6	5.100 to 6.100	10
6.2B	6.2	5.860 to 6.530	5	6.06 to 6.33	5	6.06 to 6.33	5	6.06 to 6.33	5	6.2	5.600 to 6.800	10
6.8B	6.8	6.470 to 7.140	5	6.65 to 6.93	5	6.65 to 6.93	5	6.65 to 6.93	5	6.8	6.200 to 7.400	10
7.5B	7.5	7.060 to 7.840	5	7.28 to 7.60	5	7.28 to 7.60	5	7.28 to 7.60	5	7.5	6.800 to 8.300	10
8.2B	8.2	7.760 to 8.640	5	8.02 to 8.36	5	8.02 to 8.36	5	8.02 to 8.36	5	8.2	7.400 to 9.000	10
9.1B	9.1	—	—	8.85 to 9.23	5	8.85 to 9.23	5	8.85 to 9.23	5	9.1	8.200 to 10.00	10
10B	10	—	—	9.77 to 10.21	5	9.77 to 10.21	5	9.77 to 10.21	5	10	9.000 to 11.00	10
11B	11	—	—	10.76 to 11.22	5	10.76 to 11.22	5	10.76 to 11.22	5	11	9.900 to 12.10	10
12B	12	—	—	11.74 to 12.24	5	11.74 to 12.24	5	11.74 to 12.24	5	12	10.80 to 13.20	10
13B	13	—	—	12.91 to 13.49	5	12.91 to 13.49	5	12.91 to 13.49	5	13	11.70 to 14.30	10
15B	15	—	—	14.34 to 14.98	5	14.34 to 14.98	5	14.34 to 14.98	5	15	13.50 to 16.50	10
16B	16	—	—	15.85 to 16.51	5	15.85 to 16.51	5	15.85 to 16.51	5	16	14.40 to 17.60	10
18B	18	—	—	—	—	17.56 to 18.35	2	17.56 to 18.35	5	18	16.20 to 19.80	10
20B	20	—	—	—	—	19.52 to 20.39	2	19.52 to 20.39	5	20	18.00 to 22.00	10
22B	22	—	—	—	—	21.54 to 22.47	2	21.54 to 22.47	5	22	19.80 to 24.20	10
24B	24	—	—	—	—	23.72 to 24.78	2	23.72 to 24.78	5	24	21.60 to 26.40	10
27B	27	—	—	—	—	26.19 to 27.53	2	26.19 to 27.53	2	27	24.30 to 29.70	10
30B	30	—	—	—	—	29.19 to 30.69	2	29.19 to 30.69	2	30	27.00 to 33.00	10
33B	33	—	—	—	—	32.15 to 33.79	2	32.15 to 33.79	2	33	—	—
36B	36	—	—	—	—	35.07 to 36.87	2	35.07 to 36.87	2	36	—	—
39B	39	—	—	—	—	—	—	—	—	39	—	—

Package	Surface Mount Type		Surface Mounted, Glass Type		Leaded Type		Surface Mount Type				
	2616 size PMDU (SOD-123)		4526 size PMDS (SOD-106)		3415 size LLD3 (LL-34)		2.7xφ1.8 MSD (DO-34)		2012 size UMD4 (SOD-343)		
Equivalent Circuit Diagram											
Series name	KDZ series		PTZ series		RLZ series		MTZ J series		UMZ K series		
Power (mW)	1000		1000		500		500		200		
Package symbol	TR		TE25		TE-11		T-77		TL		
Electrical Characteristics (Ta=25°C)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	Vz (V)	Iz (mA)	
3.6B	3.60 to 4.00	40	3.60 to 4.00	40	3.600 to 3.845	20	3.600 to 3.845	5	3.6K	3.600 to 3.845	5
3.9B	3.90 to 4.40	40	3.90 to 4.40	40	3.89 to 4.16	20	3.89 to 4.16	5	3.9K	3.89 to 4.16	5
4.3B	4.30 to 4.80	40	4.30 to 4.80	40	4.17 to 4.43	20	4.17 to 4.43	5	4.3K	4.17 to 4.43	5
4.7B	4.70 to 5.20	40	4.70 to 5.20	40	4.55 to 4.80	20	4.55 to 4.80	5	4.7K	4.55 to 4.75	5
5.1B	5.10 to 5.70	40	5.10 to 5.70	40	4.94 to 5.20	20	4.94 to 5.20	5	5.1K	4.98 to 5.20	5
5.6B	5.60 to 6.30	40	5.60 to 6.30	40	5.45 to 5.73	20	5.45 to 5.73	5	5.6K	5.49 to 5.73	5
6.2B	6.20 to 7.00	40	6.20 to 7.00	40	5.96 to 6.27	20	5.96 to 6.27	5	6.2K	6.06 to 6.33	5
6.8B	6.80 to 7.70	40	6.80 to 7.70	40	6.49 to 6.83	20	6.49 to 6.83	5	6.8K	6.65 to 6.93	5
7.5B	7.50 to 8.40	40	7.50 to 8.40	40	7.07 to 7.45	20	7.07 to 7.45	5	7.5K	7.28 to 7.60	5
8.2B	8.20 to 9.30	40	8.20 to 9.30	40	7.78 to 8.19	20	7.78 to 8.19	5	8.2K	8.02 to 8.36	5
9.1B	9.10 to 10.20	40	9.10 to 10.20	40	8.57 to 9.01	20	8.57 to 9.01	5	9.1K	8.85 to 9.23	5
10B	10.00 to 11.20	40	10.00 to 11.20	40	9.41 to 9.90	20	9.41 to 9.90	5	10K	9.77 to 10.21	5
11B	11.00 to 12.30	20	11.00 to 12.30	20	10.50 to 11.05	10	10.50 to 11.05	5	11K	10.76 to 11.22	5
12B	12.00 to 13.50	20	12.00 to 13.50	20	11.44 to 12.03	10	11.44 to 12.03	5	12K	11.74 to 12.24	5
13B	13.30 to 15.00	20	13.30 to 15.00	20	12.55 to 13.21	10	12.55 to 13.21	5	13K	12.91 to 13.49	5
15B	14.70 to 16.50	20	14.70 to 16.50	20	13.89 to 14.62	10	13.89 to 14.62	5	15K	14.34 to 14.98	5
16B	16.20 to 18.30	20	16.20 to 18.30	20	15.25 to 16.04	10	15.25 to 16.04	5	16K	15.85 to 16.51	5
18B	18.00 to 20.30	20	18.00 to 20.30	20	16.82 to 17.70	10	16.82 to 17.70	5	18K	17.56 to 18.35	5
20B	20.00 to 22.40	20	20.00 to 22.40	20	18.63 to 19.59	10	18.63 to 19.59	5	20K	19.52 to 20.39	5
22B	22.00 to 24.50	10	22.00 to 24.50	10	20.64 to 21.71	5	20.64 to 21.71	5	22K	21.54 to 22.47	5
24B	24.00 to 27.60	10	24.00 to 27.60	10	22.61 to 23.77	5	22.61 to 23.77	5	24K	23.72 to 24.78	5
27B	27.00 to 30.80	10	27.00 to 30.80	10	24.97 to 26.26	5	24.97 to 26.26	5	27K	26.19 to 27.53	5
30B	30.00 to 34.00	10	30.00 to 34.00	10	27.70 to 29.13	5	27.70 to 29.13	5	30K	29.19 to 30.69	5
33B	33.00 to 37.00	10	33.00 to 37.00	10	30.32 to 31.88	5	30.32 to 31.88	5	33K	32.15 to 33.79	5
36B	36.00 to 40.00	10	36.00 to 40.00	10	32.79 to 34.49	5	32.79 to 34.49	5	36K	35.07 to 36.87	5
39B	—	—	—	—	35.36 to 37.19	5	35.36 to 37.19	5	39K	—	—

Note) This table shows available voltages.

Zener Diode Product Lineup

Zener Arrays (2-4 Elements) for Terminal Protection Devices

Product No.	Part No.	Packaging symbol	Absolute Maximum Ratings(Ta=25°C)		Electrical Characteristics(Ta=25°C)		Remarks	Package	Equivalent Circuit Diagram
			P (mW)	Vz (V)	Iz(mA)				
UMZ6.2T	T106		200	7.76 to 8.64	5		IEC61000-4-2 150pF, 330Ω Contact 8kV Air 15kV	UMD3	
STZ6.8T	T146		200	6.47 to 7.14	5			SMD3	
VMZ6.8N	T2L		150	6.47 to 7.14	5			VMD3	
EMZ6.8N	TL		150	6.47 to 7.14	5			EMD3	
UMZ5.1N	T106		200	4.84 to 5.37	5			UMD3	
UMZ6.8N	T106		200	6.47 to 7.14	5			UMD3	
UMZ8.2N	T106		200	7.76 to 8.64	5			UMD3	
UMZ12N	T106		200	11.0 to 13.0	5			UMD3	
UMZ16N	T106		200	15.85 to 16.51	5			UMD3	
New UMZ18N	T106		200	17.56 to 18.35	5			UMD3	
UMZ27N	T106		200	26.19 to 27.53	5			UMD3	
New UMZ30N	T106		200	29.19 to 30.69	5			UMD3	
STZ5.6N	T146		200	5.31 to 5.92	5			SMD3	
STZ6.2N	T146		200	5.81 to 6.40	5			SMD3	
STZ6.8N	T146		200	6.47 to 7.14	5			SMD3	
EMZ6.8E	T2R		150	6.47 to 7.14	5			EMD5	
EMZ6.8JA	T2R		150	6.47 to 7.14	5			TEMD5	
UMZ6.8EN	TR		200	6.47 to 7.14	5			UMD5	
FTZ4.3E	T148		200	4.04 to 4.57	5			SMD5	
FTZ5.6E	T148		200	5.31 to 5.92	5			SMD5	
FTZ6.8E	T148		200	6.47 to 7.14	5		SMD5		
FTZ30E	T148		200	29.19 to 30.09	5		SMD5		

Low Capacitance Zener Diodes

Product No.	Part No.	Packaging symbol	Absolute Maximum Ratings(Ta=25°C)		Electrical Characteristics(Ta=25°C)				Package	Equivalent Circuit Diagram
			P (mW)	Vz (V)	Iz(mA)	Ct (pF)	f(MHz)	Vr(V)		
UMZU6.2N	T106		200	5.9 to 6.5	5	8	1	0	UMD3	
FTZU6.2E	T148		200	5.9 to 6.5	5	8	1	0	SMD5	
CDZC6.8B	T2R		100	6.650 to 6.930	5	3	1	0	VMN2	
EDZC6.8B	TE61		150	6.65 to 6.93	5	3	1	0	EMD2	
UMZC6.8N	T106		200	6.47 to 7.14	5	3	1	0	UMD3	
STZC6.8N	T146		200	6.47 to 7.14	5	3	1	0	SMD3	
RSB12Z	TL		100	9.6 to 14.4	5	1	1	0	VMD3	
RSB12W	TL		150	9.6 to 14.4	5	1	1	0	EMD3	
RSB12JS2	T2R		150	9.6 to 14.4	5	1	1	0	EMD6	

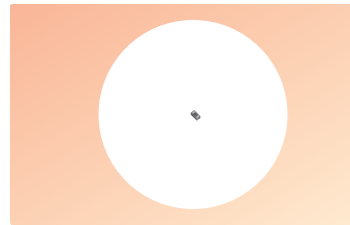
* : (3), (6)pin must be open when using.

ESD Protection Devices (TVS)

Product No.	Part No.	Packaging symbol	Absolute Maximum Ratings(Ta=25°C)		Electrical Characteristics(Ta=25°C)		Peak Pulse Power (W) (tp=10x1000μs)	Package	Equivalent Circuit Diagram
			P (mW)	Vz (V)	Iz(mA)				
RSA6.1J4	T2R		150	6.10 to 7.20	1	10	10	EMD5	
RSA6.1EN	TR		200	6.10 to 7.20	1	30	30	UMD5	
RSA6.1U5	T108		200	6.10 to 7.20	1	30	30	SMD6	

2-Terminal (single) Zener Diodes

World's smallest* package : 0603 GMD2

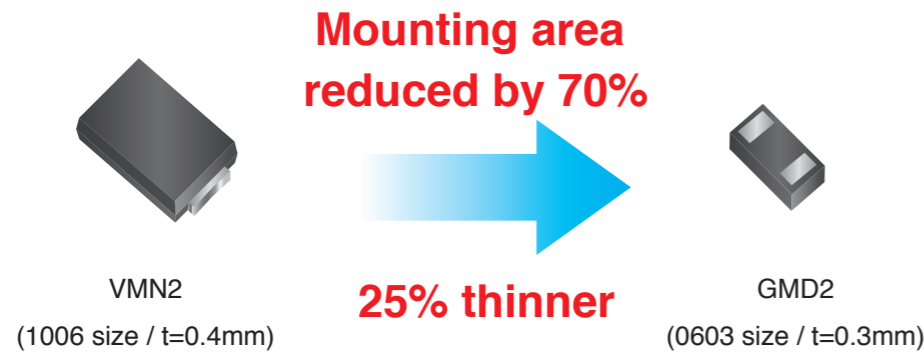


Features	Summary	Applications
<ul style="list-style-type: none"> Ultra-compact Ultra-low profile 	The industry's first* 0603-sized (0.6mm×0.3mm, t=0.3mm) low voltage diode is now available. (Package power is 100mW, same as the VMN2.)	All compact, low-profile, high density sets.

* June 2008 ROHM survey.

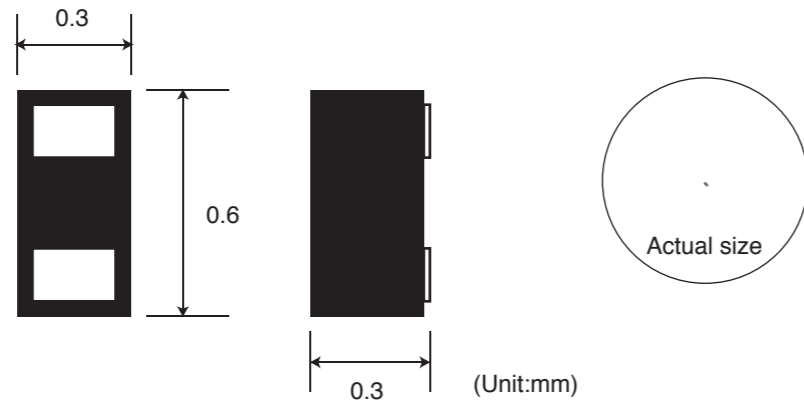
Space saving

Ideal for mobile phones and other portable electronic devices requiring the utmost in miniaturization. ROHM has developed the industry's first* 0603-sized products using original chip device structure and proprietary ultra-fine precision processing technology.



* June 2008 ROHM survey.

Dimensions



Absolute Maximum Rating

Permissible Loss	P	.....	100mW
Junction Temperature	T _j	.....	125°C
Storage Temperature	T _{stg}	.....	-55 to 125°C
Operating Temperature	T _{opr}	.....	-55 to 125°C

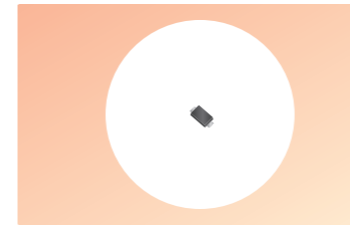
Electrical Characteristics

Part No.	Zener Voltage V _z (V)		
	Min.	Max.	Measurement Conditions I _z (mA)
GDZ3.9	3.740	4.160	5.0
GDZ4.7	4.420	4.900	5.0
GDZ5.1	4.840	5.370	5.0
GDZ5.6	5.310	5.920	5.0
GDZ6.2	5.860	6.530	5.0
GDZ6.8	6.470	7.140	5.0
GDZ7.5	7.060	7.840	5.0
GDZ8.2	7.760	8.640	5.0

Ta=25°C

Compact, High Reliability 1W Constant Voltage Diodes

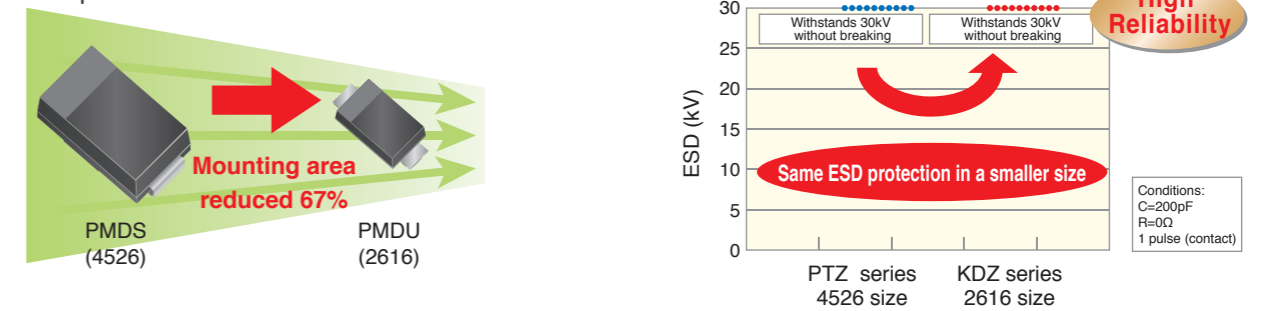
KDZ series



Features	Summary	Applications
<ul style="list-style-type: none"> Compact High power 	High 1W power in the compact 2616 size.	<ul style="list-style-type: none"> Automotive Manufacturing Power supplies

Same ESD protection in a smaller package.

A new lineup of 1W 2616 size Zener diodes is offered, which provides the same ESD resistance as conventional 4526 size products.



Industry's first* 1W diode in the 2616 size

ROHM proprietary technology is used to improve heat dissipation, resulting in a 1W rating.

	PTZ series	KDZ series
Package	PMDS 4.5mm × 2.6mm (t=1.1mm)	PMDU 2.6mm × 1.6mm (t=0.8mm)
P	1W	1W
V _z rank	3.6 to 39V	3.6 to 39V

* June 2008 ROHM survey.

Original technology improves heat dissipation

* June 2008 ROHM survey.

Absolute Maximum Rating

Permissible Loss	P	.....	1W
Junction Temperature	T _j	.....	150°C
Storage Temperature	T _{stg}	.....	-55 to 150°C
Operating Temperature	T _{opr}	.....	-55 to 150°C

Electrical Characteristics

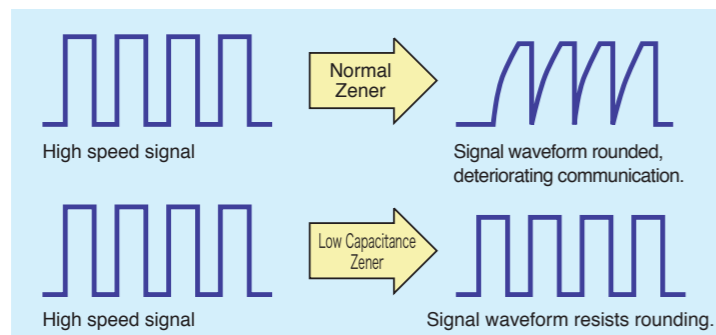
Part No.	Zener Voltage V _z (V)		
	Min.	Max.	Measurement Conditions I _z (mA)
KDZ3.6B	3.60	4.00	40
KDZ3.9B	3.90	4.40	40
KDZ4.3B	4.30	4.80	40
KDZ4.7B	4.70	5.20	40
KDZ5.1B	5.10	5.70	40
KDZ5.6B	5.60	6.30	40
KDZ6.2B	6.20	7.00	40
KDZ6.8B	6.80	7.70	40
KDZ7.5B	7.50	8.40	40
KDZ8.2B	8.20	9.30	40
KDZ9.1B	9.10	10.20	40
KDZ10B	10.00	11.20	40
KDZ11B	11.00	12.30	20
KDZ12B	12.00	13.50	20
KDZ13B	13.30	15.00	20
KDZ15B	14.70	16.50	20
KDZ16B	16.20	18.30	20
KDZ18B	18.00	20.30	20
KDZ20B	20.00	22.40	20
KDZ22B	22.00	24.50	10
KDZ24B	24.00	27.60	10
KDZ27B	27.00	30.80	10
KDZ30B	30.00	34.00	10
KDZ33B	33.00	37.00	10
KDZ36B	36.00	40.00	10

Ta=25°C

Low capacitance Zener Diodes

Features	Summary	Applications
<ul style="list-style-type: none"> Compact Ultra-low profile Low Inter-pin capacitance 	High-reliability USB 2.0 compatible Zener diodes.	<ul style="list-style-type: none"> Mobile phones Notebook PCs DSCs / DVCs LCD · PDP

Low capacitance Zener characteristics



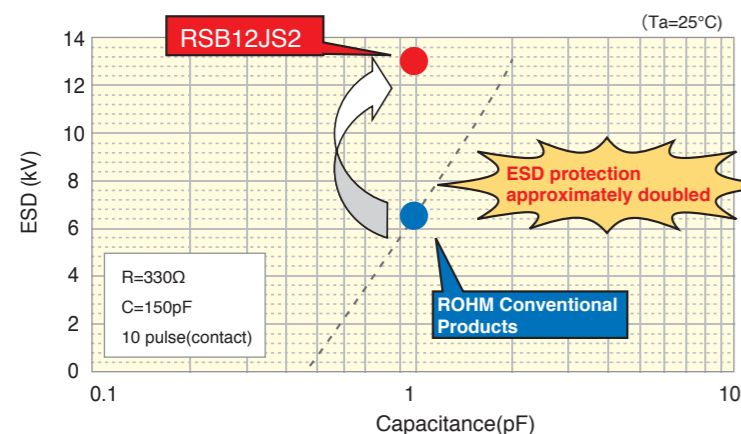
Inter-pin capacitance is large (30 to 50pF)
the signal becomes rounded
↓
Distorted signal transmission.

Inter-pin capacitance is small (1 to 8pF)
↓
Excellent signal transmission !

Electrostatic capacitance

Normally lower C_t indicates lower ESD protection. However...

ROHM provides simultaneous low C_t (1pF) and high ESD (13kV)



RSB12JS2 ($T_a=25^\circ C$)	
	EMD6 (1612 size)
Permissible Loss	150mW/Total
Storage Temperature	-55 to 150°C
Zener Voltage	9.6V to 14.4V
Reverse Current	0.1μA Max.
Capacitance Between Pins	1pF typ.

Lineup

Part No.	Absolute Maximum Ratings ($T_a=25^\circ C$)		Electrical Characteristics ($T_a=25^\circ C$)				Package	Equivalent Circuit Diagram
	P (mW)	V_z (V)	I_z (mA)	C_t (pF)	f (MHz)	V_R (V)		
UMZU6.2N	200	5.9 to 6.5	5	8	1	0	UMD3	
FTZU6.2E	200	5.9 to 6.5	5	8	1	0	SMD5	
CDZC6.8B	100	6.65 to 6.93	5	3	1	0	VMN2	
EDZC6.8B	150	6.65 to 6.93	5	3	1	0	EMD2	
EMZC6.8N	150	6.47 to 7.14	5	3	1	0	EMD3	
UMZC6.8N	200	6.47 to 7.14	5	3	1	0	UMD3	
STZC6.8N	200	6.47 to 7.14	5	3	1	0	SMD3	
RSB12Z	100	9.6 to 14.4	5	1	1	0	VMD3	
RSB12W	150	9.6 to 14.4	5	1	1	0	EMD3	
RSB12JS2	150	9.6 to 14.4	5	1	1	0	EMD6	

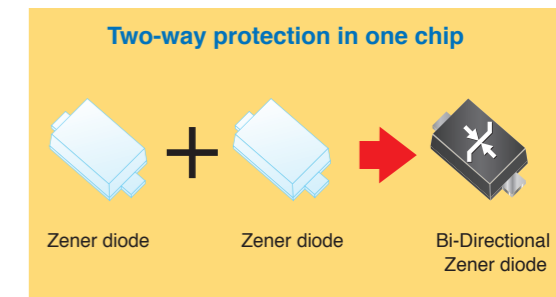
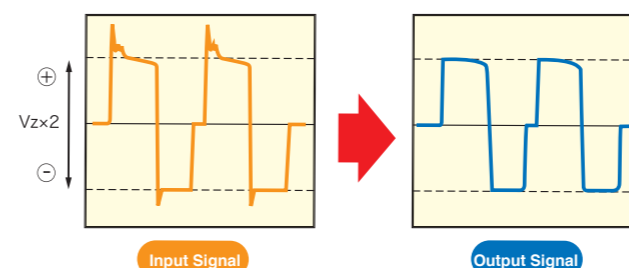
*:The (3) and (6) pin should be OPEN.

Bi-Directional Zener Diodes

Features	Summary	Applications
<ul style="list-style-type: none"> Compact Space saving 	Protects against forward and reverse surges. Contributes to reduced component quantity and set size. ROHM's Zener diodes offer bidirectional surge protection.	<ul style="list-style-type: none"> Portable equipment DSC / DVCs Mobile phones Automotive

Protects against forward and reverse surges.

ROHM's unique configuration contributes to reduced component quantity and set size.
ROHM's Zener diodes offer bidirectional surge protection.



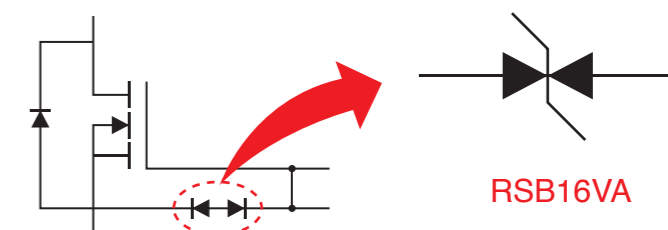
High Reliability Bi-directional Zener Diodes

TUMD2 package features improved heat dissipation and 500mW package power.
Most suitable for CAN-BUS / LIN-BUS.

Sample Application Circuit

Halves the mounting area and number of components by replacing two Zener Diodes for Gate-Source surge protection.

Application Example : Power MOS surge protection in an ECU



Lineup

Part No.	Absolute Maximum Ratings ($T_a=25^\circ C$)		Electrical Characteristics ($T_a=25^\circ C$)		Remarks	Package	Equivalent Circuit Diagram
	P (mW)	V_z (V)	I_z (mA)				
RSB6.8CS	100	5.78 to 7.82	1		IEC61000-4-2 150pF, 330Ω Contact 8kV In air 15kV	VMN2	
RSB6.8G	100	5.78 to 7.82	1			VMD2	
RSB5.6S	150	4.76 to 6.44	1			EMD2	
RSB6.8S	150	5.78 to 7.82	1			EMD2	
RSB16V	200	14.4 to 17.6	1			UMD2	
RSB18V	200	16.2 to 19.8	1			UMD2	
RSB27V	200	26.2 to 32.0	1			UMD2	
RSB16VA	500	14.4 to 17.6	1			TUMD2	
RSB6.8F2	200	5.78 to 7.82	1			UMD3	
RSB16F2	200	14.4 to 17.6	1			UMD3	
RSB18F2	200	16.2 to 19.8	1		UMD3		
RSB27F2	200	26.2 to 32.0	1		UMD3		

Schottky Barrier Diode Lineup

High Efficiency, High Reliability Surface Mount Type - RSX series (Io≥0.5A)											
Product No.		Absolute Maximum Ratings (Ta=25°C)*				Electrical Characteristics (Ta=25°C)*				Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _o (A)	I _{FSM} 60Hz.1~	Max. V _F (V)	I _R (mA)	Max. V _R (V)			
RSX051VA-30	TR	30	30	0.5	5.0	0.39	0.5	0.20	30	TUMD2	
RSX071VA-30	TR	30	30	0.7	5.0	0.42	0.7	0.20	30	TUMD2	
RSX101VA-30	TR	30	30	1	5.0	0.47	1.0	0.20	30	TUMD2	
RSX101M-30	TR	30	30	1	45	0.39	1.0	0.20	30	PMDU	
RSX301LA-30	TR	30	30	3	70	0.42	3.0	0.20	30	PMDT	
RSX501LA-20	TR	25	20	5	70	0.39	3.0	0.50	20	PMDT	
RSX201L-30	TE25	30	30	2	60	0.44	2.0	0.15	30	PMDS	
RSX301L-30	TE25	30	30	3	70	0.42	3.0	0.20	30	PMDS	
RSX501L-20	TE25	25	20	5	70	0.39	3.0	0.50	20	PMDS	
RSX1001T3	Bulk	30	30	10	150	0.44	5.0	0.5	30	TO-220FN	

Note : * Value / Element.

Small Signal Type Schottky Barrier Diodes (Io<0.5A)											
Product No.		Absolute Maximum Ratings (Ta=25°C)*1				Electrical Characteristics (Ta=25°C)*1				Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _o (mA)	I _{FSM} 60Hz.1~	Max. V _F (V)	I _R (μA)	Max. V _R (V)			
RB521ZS-30	T2R	30	30	100	0.5	0.37	10	7	10	GMD2	
RB520ZS-30	T2R	30	30	100	0.5	0.46	10	0.3	10	GMD2	
RB521CS-30	T2R	—	30	100	0.5	0.35	10	10	10	VMN2	
RB520CS-30	T2R	—	30	100	0.5	0.45	10	0.5	10	VMN2	
RB751CS-40	T2R	40	30	30	0.2	0.37	1	0.5	30	VMN2	
RB521G-30	T2R	—	30	100	0.5	0.35	10	10	10	VMD2	
RB520G-30	T2R	—	30	100	0.5	0.45	10	0.5	10	VMD2	
RB751G-40	T2R	40	30	30	0.2	0.37	1	0.5	30	VMD2	
RB521S-30	TE61	—	30	200	1	0.5	200	30	10	EMD2	
RB520S-30	TE61	—	30	200	1	0.6	200	1	10	EMD2	
RB751S-40	TE61	40	30	30	0.2	0.37	1	0.5	30	EMD2	
RB521S-40	TE61	45	40	200	4	0.45	0.1	90	40	EMD2	
RB520S-40	TE61	40	40	200	1	0.55	100	10	40	EMD2	
RB751V-40	TE-17	40	30	30	0.2	0.37	1	0.5	30	UMD2	
RB501V-40	TE-17	45	40	100	1	0.55	100	30	10	UMD2	
RB500V-40	TE-17	45	40	100	1	0.45	10	1	10	UMD2	
RB721Q-40	T-77	40	40	30	0.2	0.37	1	0.5	25	MSD	
RB441Q-40	T-77	40	40	100	1	0.55	100	100	40	MSD	
RB715Z	T2L	40	40	30	0.2	0.37	1	1	10	VMD3	
RB715W	TL	40	40	30	0.2	0.37	1	1	10	EMD3	
RB715F	T106	40	40	30	0.2	0.37	1	1	10	UMD3	
RB495D	T146	40	25	*2 400	2	0.5	200	70	25	SMD3	
RB705D	T146	40	40	30	0.2	0.37	1	1	10	SMD3	
RB425D	T146	40	40	100	1	0.55	100	30	10	SMD3	
RB717F	T106	40	40	30	0.2	0.37	1	1	10	UMD3	
RB557W	TL	—	30	100	0.5	0.35	10	10	10	EMD3	
RB558W	TL	—	30	100	0.5	0.35	10	10	10	EMD3	
RB548W	TL	—	30	100	0.5	0.45	10	0.5	10	EMD3	
RB706F-40	T106	45	40	30	0.2	0.37	1	1	10	UMD3	
RB706D-40	T146	45	40	30	0.2	0.37	1	1	10	SMD3	
RB451F	T106	40	40	100	1	0.55	100	30	10	UMD3	
RB450F	T106	45	40	100	1	0.45	10	1	10	UMD3	
RB421D	T146	40	40	100	1	0.55	100	30	10	SMD3	
RB420D	T146	40	40	100	1	0.45	10	1	10	SMD3	
RB481Y	T2R	—	30	100	1	0.43	100	30	10	EMD4	
RB480Y	T2R	—	30	100	1	0.53	100	1	10	EMD4	
RB481Y-90	T2R	90	90	100	1	0.61	100	100	90	EMD4	
RB480Y-90	T2R	90	90	100	1	0.69	100	5	90	EMD4	
RB481K	TL	30	30	200	1	0.5	200	30	10	UMD4	
RB480K	TL	45	40	100	1	0.6	100	1	10	UMD4	
RB471E	T148	40	40	100	1	0.55	100	30	10	SMD5	
RB531XN	TR	—	30	100	1	0.43	100	30	10	UMD6	
RB530XN	TR	—	30	100	1	0.53	100	1	10	UMD6	
RB731XN	TR	40	40	30	0.2	0.37	1	1	10	UMD6	
RB731U	T108	40	40	30	0.2	0.37	1	1	10	SMD6	

Note: *1 Value / Element

*2 1/2 Io per diode.

Schottky Barrier Diode Lineup

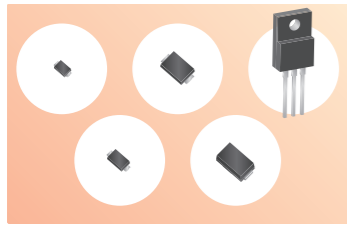
Middle Power Schottky Barrier Diodes (Io≥0.5A)											
Product No.		Absolute Maximum Ratings (Ta=25°C)*				Electrical Characteristics (Ta=25°C)*				Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _o (A)	I _{FSM} 60Hz.1~	Max. V _F (V)	I _R (mA)	Max. V _R (V)			
RB551V-30	TE-17	30	20	0.5	2	0.36	0.1	0.1	20	UMD2	
RB161VA-20	TR	30	20	1	5	0.42	1	1	20	TUMD2	
RB162VA-20	TR	25	20	1	5	0.40	1	1.2	20	TUMD2	
RB550VA-30	TR	30	30	1	3	0.52	1	0.03	10	TUMD2	
RB160VA-40	TR	40	40	1	5	0.55	0.7	0.05	40	TUMD2	
RB411VA-50	TR	50	20	0.5	3	0.5	0.5	0.03	10	TUMD2	
RB400VA-50	TR	50	40	0.5	3	0.55	0.5	0.05	30	TUMD2	
RB021VA-90	TR	90	90	0.2	5	0.49	0.2	0.9	90	TUMD2	
RB161M-20	TR	25	20	1	30	0.35	1	0.7	20	PMDU	
RB051M-2Y	TR	20	20	3	30	0.46	3	0.9	20	PMDU	
RB160M-30	TR	30	30	1	30	0.48	1	0.05	30	PMDU	
RB070M-30	TR	30	30	1.5	30	0.49	1.5	0.05	30	PMDU	
RB060M-30	TR	30	30	2	55	0.49	2	0.05	30	PMDU	
RB160M-40	TR	40	40	1	30	0.51	1	0.03	40	PMDU	
RB160M-60	TR	60	60	1	30	0.55	1	0.05	60	PMDU	
RB160M-90	TR	90	90	1	30	0.73	1	0.1	90	PMDU	
RB050LA-30	TR	—	30	3	70	0.45	3	0.15	30	PMDT	
RB050LA-40	TR	40	40	3	70	0.55	3	0.1	40	PMDT	
RB051LA-40	TR	40	20	3	70	0.45	3	1	20	PMDT	
RB055LA-40	TR	40	40	3	70	0.62	3	0.1	40	PMDT	
RB081L-20	TE25	25	20	5	70	0.45	5	0.7	20	PMDS	
RB161L-40	TE25	40	20	1	70	0.4	1	1	20	PMDS	
RB051L-40	TE25	40	20	3	70	0.45	3	1	20	PMDS	
RB160L-40	TE25	40	40	1	70	0.55	1	0.1	40	PMDS	
RB060L-40	TE25	40	40	2	70	0.5	2	1	40	PMDS	
RB050L-40	TE25	40	40	3	70	0.55	3	1	40	PMDS	
RB055L-40	TE25	40	40	3	40	0.65	3	0.5	40	PMDS	
RB160L-60	TE25	60	60	1	30	0.58	1	1	60	PMDS	
RB160L-90	TE25	95	90	1	30	0.73	1	0.1	90	PMDS	
RB160A30	T-32	30	30	1	70	0.48	1	0.05	30	MSR	
RB160A40	T-32	40	40	1	50	0.55	1	0.03	40	MSR	
RB160A60	T-32	60	60	1	60	0.55	1	0.05	60	MSR	
RB160A90	T-32	90	90	1	50	0.73	1	0.1	90	MSR	
RB201A60	T-32	60	60	2	40	0.58	2	0.1	60	MSR	
RB461F	T106	25	20	0.7	3	0.49	0.7	0.2	20	UMD3	
RB491D	T146	25	20	1	3	0.45	1	0.2	20	SMD3	
RB411D	T146	40	20	0.5	3	0.5	0.5	0.03	10	SMD3	
RB400D	T146	40	40	0.5	3	0.55	0.5	0.05	30	SMD3	
RB496KA	TR	—	20	1	5	0.43	1	0.8	10	TUMD5	
RB496EA	TR	20	20	1	10	0.4	1	0.5	10	TSMDS	
RB550EA	TR	30	30	0.7	15	0.49	0.7	50	30	TSMDS	

Note) * Value / Element.

Power Type - Includes High Efficiency, High Reliability Leaded Units											
Product No.		Absolute Maximum Ratings (Ta=25°C)*1				Electrical Characteristics (Ta=25°C)*1				Package	Equivalent Circuit Diagram
Part No.	Packaging Symbol	V _{RM} (V)	V _R (V)	I _o *2 (A)	I _{FSM} (A) 60Hz.1~	Max. V _F (V)	I _F (A)	I _R (mA) Max.	V _R (V)		
RB095B-30	TL	35	30	6	45	0.425	3	0.2	30	D-Pack (CPD)	
RB095B-40	TL	45	40	6	45	0.55	3	0.1	40	D-Pack (CPD)	
RB095B-60	TL	60	60	6	45	0.58	3	0.1	60	D-Pack (CPD)	
RB095B-90	TL	90	90	6	45	0.75	3	0.15	90	D-Pack (CPD)	
RB085B-30	TL	35	30	10	35	0.48	4	0.3	30	D-Pack (CPD)	
RB085B-40	TL	45	40	10	45	0.55	5	0.2	40	D-Pack (CPD)	
RB085B-90	TL	90	90	10	45	0.83	5	0.15	90	D-Pack (CPD)	
RB075B40S	TL	40	40	5	45	0.75	5	0.005	40	D-Pack (CPD)	
RB225N-40	TL	40	40	30	50	0.55	15	0.5	40	LPDS	
RSX1001T3	Bulk	30	30	10	150	0.44	5	0.5	30	TO-220FN	
RB095T-40	Bulk	45	40	6	100	0.55	3	0.1	40	TO-220FN	
RB085T-40	Bulk	45	40	10	100	0.55	5	0.2	40	TO-220FN	
RB205T-40	Bulk	45	40	15	100	0.55	7.5	0.3	40	TO-220FN	
RB215T-40	Bulk	45	40	20	100	0.55	10	0.5	40	TO-220FN	
RB225T-40	Bulk	40	40	30	50	0.63	15	0.5	40	TO-220FN	
RB095T-60	Bulk	60	60	6	100	0.58	3	0.1	60	TO-220FN	
RB085T-60	Bulk	60	60	10	100	0.58	5	0.3	60	TO-220FN	
RB205T-60	Bulk	60	60	15	100	0.58	7.5	0.6	60	TO-220FN	
RB215T-60	Bulk	60	60	20	100	0.58	10	0.6	60	TO-220FN	
RB225T-60	Bulk	60	60	30	100	0.63	15	0.6	60	TO-220FN	
RB095T-90	Bulk	90	90	6	100	0.75	3	0.15	90	TO-220FN	
RB085T-90	Bulk	90	90	10	100	0.83	5	0.15	90	TO-220FN	
RB205T-90	Bulk	90	90	15	100	0.78	7.5	0.3	90	TO-220FN	
RB215T-90											

High Efficiency, High Reliability Surface Mount Type

RSX series



Features

- Low V_F
- Low I_R
- Anti-surge

Summary

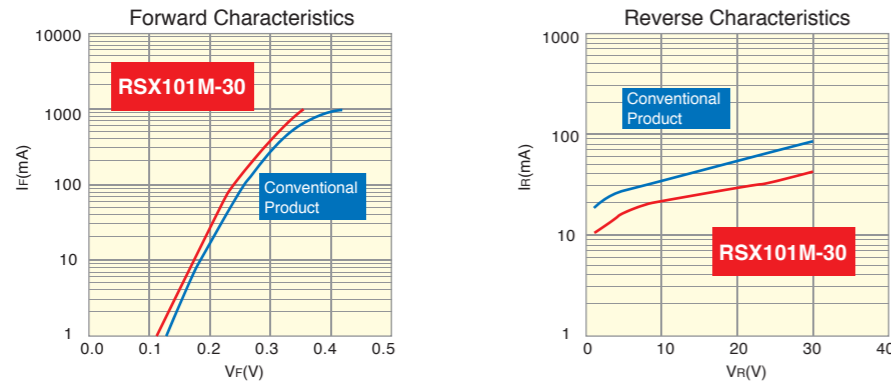
Simultaneous low V_F and low I_R has been achieved through utilization of original precision processes and device configuration. High ESD resistance is enabled as well.

Applications

- Switches
- Rectifiers

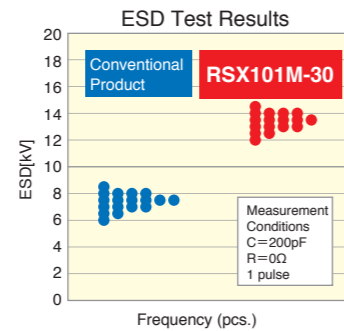
Low V_F • Low I_R

Generally, there is a trade-off between V_F (Forward Voltage) and I_R (Reverse Current). ROHM's RSX series, however, feature simultaneously low V_F and I_R by utilizing proprietary precision processes and device configuration.



Highly ESD resistance for greater reliability

Conventional Schottky Barrier Diodes possess weaker ESD resistance than even PN junction diodes. ROHM's RSX series, on the other hand, features greater resistance to ESD than competitor products due to utilization of precision processes and device configuration.

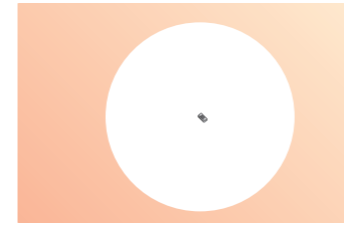


Lineup

Part No.	Absolute Maximum Ratings (Ta=25°C) *1				Electrical Characteristics (Ta=25°C) *1				Package	Equivalent Circuit Diagram
	V_{RM} (V)	V_R (V)	I_O (A)	I_{FSM} 60Hz.1~	V_F (V)		I_R (mA)			
RSX051VA-30	30	30	0.5	5.0	0.39	0.5	0.20	30	TUMD2	
RSX071VA-30	30	30	0.7	5.0	0.42	0.7	0.20	30	TUMD2	
RSX101VA-30	30	30	1	5.0	0.47	1.0	0.20	30	TUMD2	
RSX101M-30	30	30	1	45	0.39	1.0	0.20	30	PMDU	
RSX301LA-30	30	30	3	70	0.42	3.0	0.20	30	PMDT	
RSX501LA-20	25	20	5	70	0.39	3.0	0.50	20	PMDT	
RSX201L-30	30	30	2	60	0.44	2.0	0.15	30	PMDS	
RSX301L-30	30	30	3	70	0.42	3.0	0.20	30	PMDS	
RSX501L-20	25	20	5	70	0.39	3.0	0.50	20	PMDS	
RSX1001T3	30	30	10	150	0.44	5.0	0.5	30	TO-220FN	

Note: *1 Rating per element.

World's smallest* package : 0603 GMD2



Features

- Ultra small
- Ultra thin

Summary

ROHM has developed the industry's first* commercial Schottky Barrier Diodes in the 0603 size (0.6mm×0.3mm, t=0.3mm). (Package power is the same as the VMN2 – 100mW)

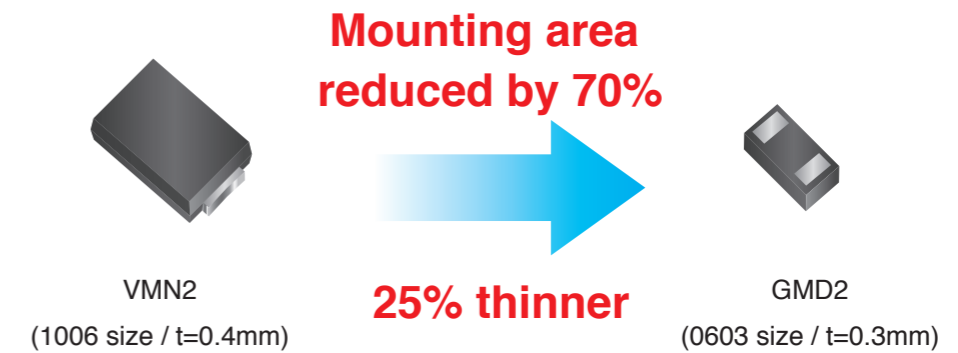
Applications

- Switches
- Rectifiers

* June 2008 ROHM survey.

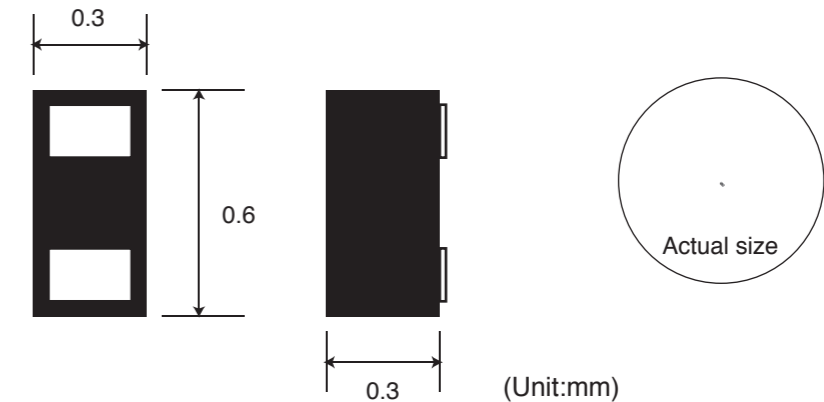
Space saving

Ideal for mobile phones and other portable electronic devices requiring the utmost in miniaturization. ROHM has developed the industry's first* 0603-sized products using original chip device structure and proprietary ultra-fine precision processing technology.



* June 2008 ROHM survey.

Dimensions

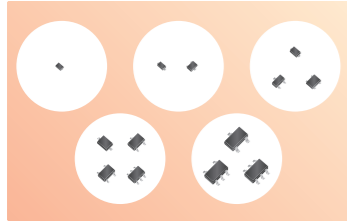


Lineup

Part No.	Absolute Maximum Ratings (Ta=25°C) *1				Electrical Characteristics (Ta=25°C) *1				Package	Equivalent Circuit Diagram
	V_{RM} (V)	V_R (V)	I_O (mA)	I_{FSM} 60Hz.1~	V_F (V)		I_R (μA)			
RB521ZS-30	30	30	100	0.5	0.37	10	7	10	GMD2	
RB520ZS-30	30	30	100	0.5	0.46	10	0.3	10	GMD2	

Note: *1 Rating per element.

Small Signal Type Schottky Barrier Diodes



Features Summary Applications

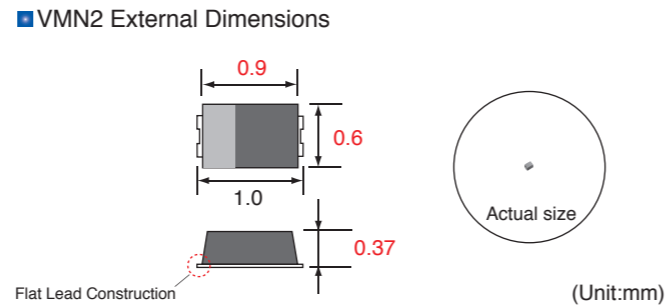
Features
 • Small
 • High performance

Summary
 ROHM's SBD lineup features high ESD and IFSM resistance with simultaneously low V_F and low I_R .

Applications
 • Switches
 • Rectifiers

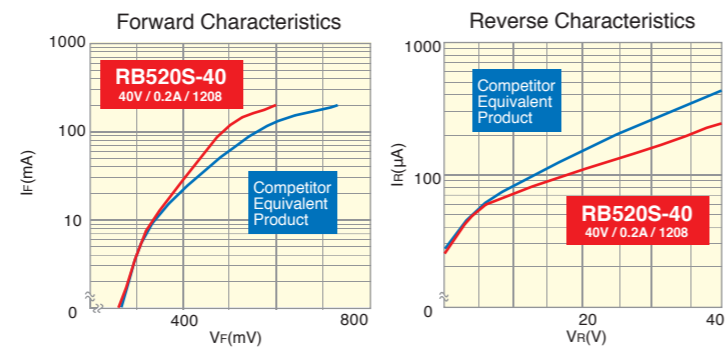
Compact VMN2 package

The compact VMN2 package reduces mounting area (package power=100mW, the same as the VMD2). In addition, unlike the bottom surface electrode configuration of competitor products, the flat lead construction makes it easy to automatically verify the solder condition.



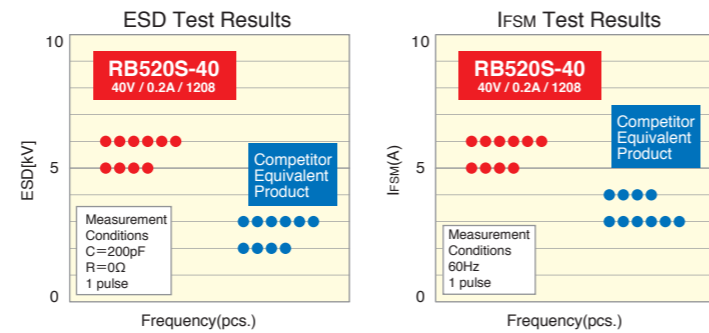
Superior low V_F , low I_R characteristics

Optimization of device conditions has enabled low V_F and low I_R .



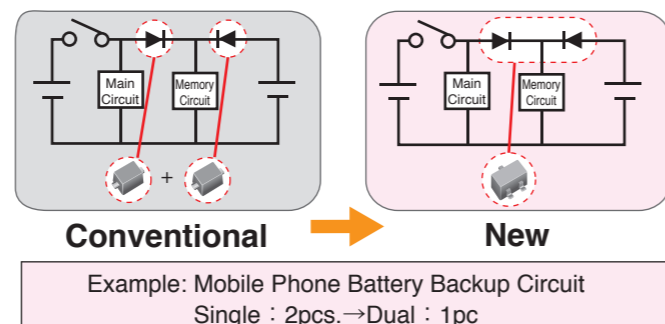
High ESD, high IFSM resistance

Device optimization ensures high ESD and IFSM tolerance.



Saves space

ROHM offers a broad lineup of high-density single-, dual-, and triple-element models that contribute to end-product miniaturization.



Lineup

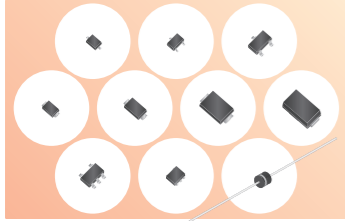
Type	Part No.	Absolute Maximum Ratings (Ta=25°C)*1			Electrical Characteristics (Ta=25°C)*1				Package	Equivalent Circuit Diagram	
		V _{RM} (V _R) [V]	I _O (mA)	I _{FSM} (A) 60Hz, 1 ϕ	V _F (V) Max.	I _F (mA)	I _R (μ A) Max.	V _R (V)			
Single	RB521CS-30	-	(30)	100	0.5	0.35	10	10	10	VMN2	
	RB520CS-30			100	0.5	0.45	10	0.5	10	VMN2	
	RB521G-30			100	0.5	0.35	10	10	10	VMD2	
	RB520G-30			100	0.5	0.45	10	0.5	10	VMD2	
	RB521S-30	200	1	0.5	200	30	10	EMD2			
	RB520S-30	200	1	0.6	200	1	10	EMD2			
	RB751CS-40	40	(30)	30	0.2	0.37	1	0.5	30	VMN2	
	RB751G-40			30	0.2	0.37	1	0.5	30	VMD2	
	RB751S-40			30	0.2	0.37	1	0.5	30	EMD2	
	RB751V-40	30	0.2	0.37	1	0.5	30	UMD2			
	RB520S-40	40	(40)	200	1	0.55	100	10	40	EMD2	
	RB721Q-40			30	0.2	0.37	1	0.5	25	MSD	
	RB441Q-40	100	1	0.55	100	100	40	MSD			
	RB501V-40	45	(40)	100	1	0.55	100	30	10	UMD2	
	RB500V-40			100	1	0.45	10	1	10	UMD2	
RB021VA-90	90	(90)	200	5	0.49	200	900	90	TUMD2		
RB451F	40	(40)	100	1	0.55	100	30	10	UMD3		
RB421D			100	1	0.55	100	30	10	SMD3		
RB420D			100	1	0.45	10	1	10	SMD3		
RB450F	45	(40)	100	1	0.45	10	1	10	UMD3		
RB495D	40	(25)	*2 400	2	0.5	200	70	25	SMD3		
RB715Z			30	0.2	0.37	1	1	10	VMD3		
RB715W			30	0.2	0.37	1	1	10	EMD3		
RB715F			30	0.2	0.37	1	1	10	UMD3		
RB705D			30	0.2	0.37	1	1	10	SMD3		
RB425D			100	1	0.55	100	30	10	SMD3		
RB717F			40	(40)	30	0.2	0.37	1	1	10	UMD3
RB557W	-	(30)	100	0.5	0.35	10	10	10	EMD3		
RB558W	-	(30)	100	0.5	0.35	10	10	10	EMD3		
RB548W	45	(40)	100	0.5	0.45	10	0.5	10	EMD3		
RB706F-40			30	0.2	0.37	1	1	10	UMD3		
RB706D-40			30	0.2	0.37	1	1	10	SMD3		
RB480Y	-	(30)	100	1	0.53	100	1	10	EMD4		
RB481Y			100	1	0.43	100	30	10	EMD4		
RB481K	30	(30)	200	1	0.5	200	30	10	UMD4		
RB471E	40	(40)	100	1	0.55	100	30	10	SMD5		
RB480K	45	(40)	100	1	0.6	100	1	10	UMD4		
RB480Y-90	90	(90)	100	1	0.69	100	5	90	EMD4		
RB481Y-90			100	1	0.61	100	100	90	EMD4		
RB531XN	-	(30)	100	1	0.43	100	30	10	UMD6		
RB530XN			100	1	0.53	100	1	10	UMD6		
RB731XN	40	(40)	30	0.2	0.37	1	1	10	UMD6		
RB731U			30	0.2	0.37	1	1	10	SMD6		

Note: *1 Value / element. *2 Value / 2 circuits.

Schottky Barrier Diodes

Schottky Barrier Diodes

Middle Power Schottky Barrier Diodes



Features

- Small
- Anti-surge

Summary

The lineup includes compact, low-profile packages, such as a 1913 sized product with $I_o=1A$.

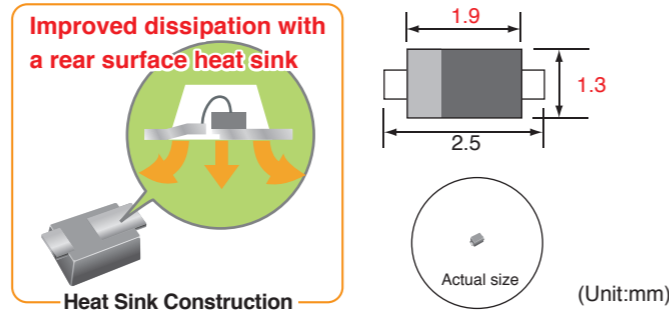
Applications

- Switches
- Rectifiers

1A I_o in the 1913 size

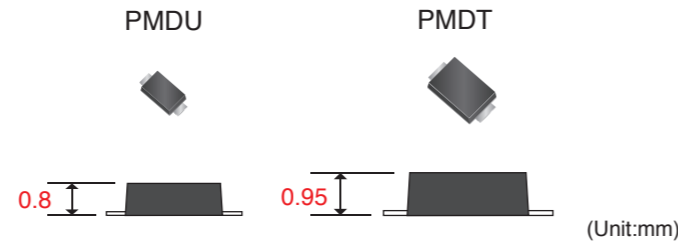
ROHM offers a 1A class product in the TUMD2 package (1913 size, $t=0.6mm$). In addition, a rear-surface heat sink boosts package power up to 0.5W (compared with 0.2W for same sized units).

TUMD2 External Dimensions



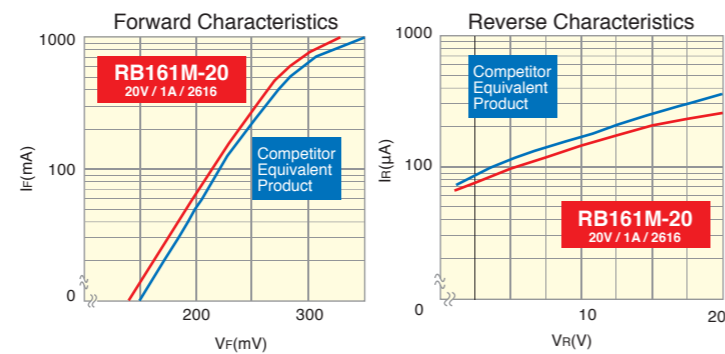
Low profile package lineup

The PMDU (2616 size) and PMDT (3826 size) package types are well-suited for thin portable devices.



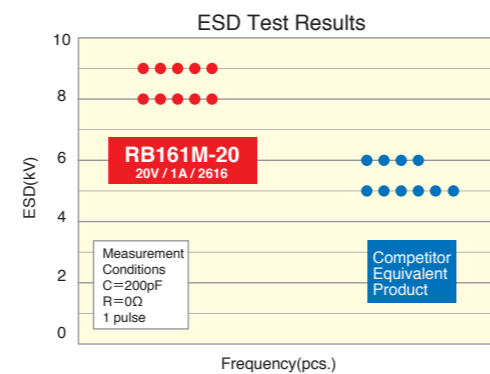
Simultaneous low V_f and I_r

Optimization of device conditions has enabled low V_f and low I_r .



High ESD resistance

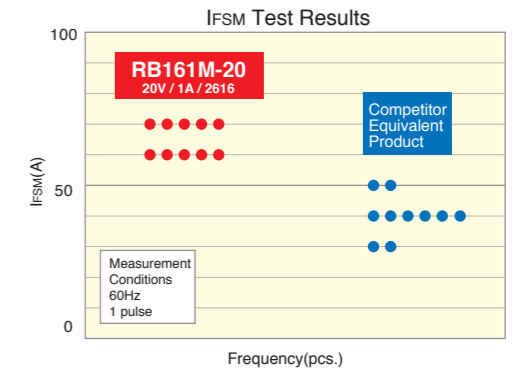
Device optimization ensures high ESD.



Middle Power Schottky Barrier Diodes

High I_{FSM} resistance

ROHM's wireless configuration ensures higher I_{FSM} tolerance than conventional wired structures, ensuring greater resistance to surge current during power ON.

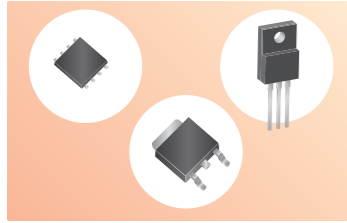


Lineup

Type	Part No.	Absolute Maximum Ratings ($T_a=25^\circ C$)*1			Electrical Characteristics ($T_a=25^\circ C$)*1				Package	Equivalent Circuit Diagram
		$V_{RM}(V_R)$ [V]	I_o (A)	$I_{FSM}(A)$ 60Hz, 1 pulse	$V_f(V)$ Max.	$I_f(A)$	$I_r(mA)$ Max.	$V_R(V)$		
Single	⊙ RB051M-2Y	20 (20)	3	30	0.46	3	0.9	20	PMDU	
	⊙ RB162VA-20	25 (20)	1	5	0.40	1	1.2	20	TUMD2	
	⊙ RB161M-20		1	30	0.35	1	0.7	20	PMDU	
	⊙ RB081L-20		5	70	0.45	5	0.7	20	PMDS	
	⊙ RB461F		0.7	3	0.49	0.7	0.2	20	UMD3	
	⊙ RB050LA-30	— (30)	3	70	0.45	3	0.15	30	PMDT	
	⊙ RB551V-30	30 (20)	0.5	2	0.36	0.1	0.1	20	UMD2	
	⊙ RB161VA-20		1	5	0.42	1	1	20	TUMD2	
	⊙ RB550VA-30	30 (30)	1	3	0.52	1	0.03	10	TUMD2	
	⊙ RB160M-30		1	30	0.48	1	0.05	30	PMDU	
	⊙ RB160A30		1	70	0.48	1	0.05	30	MSR	
	⊙ RB070M-30	40 (20)	1.5	30	0.49	1.5	0.05	30	PMDU	
	⊙ RB161L-40		1	60	0.4	1	1	20	PMDS	
	⊙ RB051L-40		3	70	0.45	3	1	20	PMDS	
	⊙ RB411D		0.5	3	0.5	0.5	0.03	10	SMD3	
	⊙ RB160VA-40	40 (40)	1	5	0.55	0.7	0.05	40	TUMD2	
	⊙ RB160M-40		1	30	0.51	1	0.03	40	PMDU	
	⊙ RB160L-40		1	70	0.55	1	0.1	40	PMDS	
	⊙ RB160A40		1	50	0.55	1	0.03	40	MSR	
	⊙ RB060L-40		2	70	0.5	2	1	40	PMDS	
	⊙ RB050LA-40		3	70	0.55	3	0.1	40	PMDT	
	⊙ RB050L-40		3	70	0.55	3	1	40	PMDS	
	⊙ RB055L-40		3	40	0.65	3	0.5	40	PMDS	
	⊙ RB055LA-40		3	70	0.62	3	0.1	40	PMDT	
	⊙ RB411VA-50		50 (20)	0.5	3	0.5	0.5	0.03	10		TUMD2
	⊙ RB400VA-50	50 (40)	0.5	3	0.55	0.5	0.05	30	TUMD2	
	⊙ RB160M-60	60 (60)	1	30	0.55	1	0.05	60	PMDU	
	⊙ RB160L-60		1	30	0.58	1	1	60	PMDS	
	⊙ RB160A60		1	60	0.55	1	0.05	60	MSR	
	⊙ RB201A60		2	40	0.58	2	0.1	60	MSR	
⊙ RB160M-90	90 (90)	1	30	0.73	1	0.1	90	PMDU		
⊙ RB160A90		1	50	0.73	1	0.1	90	MSR		
⊙ RB491D	25 (20)	1	3	0.45	1	0.2	20	SMD3		
⊙ RB400D	40 (40)	0.5	3	0.55	0.5	0.05	30	SMD3		
Dual	⊙ RB496KA	— (20)	1	5	0.43	1	0.8	10	TSMD5	
	⊙ RB496EA	20 (20)	1	10	0.4	1	0.5	10	TUMD5	
	⊙ RB550EA	30 (30)	0.7	15	0.49	0.7	50	30	TSMD5	

Note: *1 Value / element. ⊙: Wireless Structure

Power Type - Includes High Efficiency, High Reliability Leaded Units



Features

- Low V_f
- Low I_r
- Anti-surge

Summary

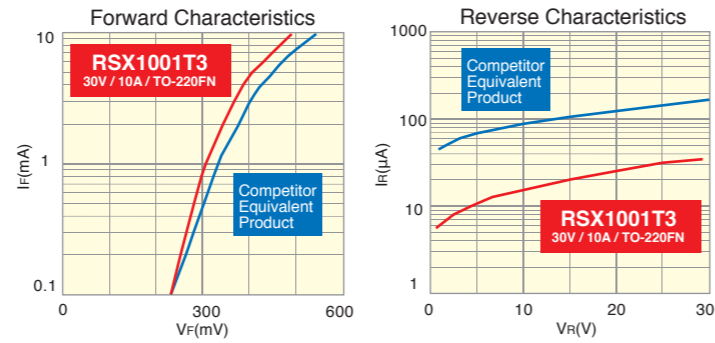
The lineup includes conventional high power products as well as power diodes featuring a voltage resistance of 100V.

Applications

- Switches
- Rectifiers

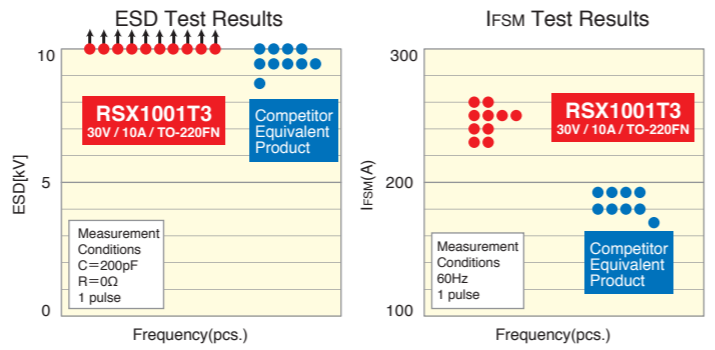
Superior low V_f , low I_r characteristics

ROHM's diodes feature high efficiency conversion with low V_f for low heat generation and lower losses with low I_r , even when running warm.



High ESD resistance and High IFSM resistance

Precision processes and a unique device configuration have resulted in a higher ESD resistance than conventional products.



Lineup

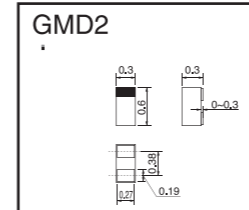
Part No.	Absolute Maximum Ratings (Ta=25°C) *1				Electrical Characteristics (Ta=25°C) *1				Package	Equivalent Circuit Diagram
	V _{RM} (V)	V _R (V)	I _O (A)	I _{FSM} (A) 60Hz, 1 pulse	V _f (V) Max.	I _f (A)	I _r (mA) Max.	V _R (V)		
RB095B-30	35	30	6	45	0.425	3	0.2	30	D-Pack (CPD)	
RB095B-40	45	40	6	45	0.55	3	0.1	40	D-Pack (CPD)	
RB095B-60	60	60	6	45	0.58	3	0.1	60	D-Pack (CPD)	
RB095B-90	90	90	6	45	0.75	3	0.15	90	D-Pack (CPD)	
RB085B-30	35	30	10	35	0.48	4	0.3	30	D-Pack (CPD)	
RB085B-40	45	40	10	45	0.55	5	0.2	40	D-Pack (CPD)	
RB085B-90	90	90	10	45	0.83	5	0.15	90	D-Pack (CPD)	
RB075B40S	40	40	5	45	0.75	5	0.005	40	D-Pack (CPD)	
RB225N-40	40	40	30	50	0.55	15	0.5	40	LPDS	
RSX1001T3	30	30	10	150	0.44	5	0.5	30	TO-220FN	
RB095T-40	45	40	6	100	0.55	3	0.1	40	TO-220FN	
RB085T-40	45	40	10	100	0.55	5	0.2	40	TO-220FN	
RB205T-40	45	40	15	100	0.55	7.5	0.3	40	TO-220FN	
RB215T-40	45	40	20	100	0.55	10	0.5	40	TO-220FN	
RB225T-40	40	40	30	50	0.63	15	0.5	40	TO-220FN	
RB095T-60	60	60	6	100	0.58	3	0.1	60	TO-220FN	
RB085T-60	60	60	10	100	0.58	5	0.3	60	TO-220FN	
RB205T-60	60	60	15	100	0.58	7.5	0.6	60	TO-220FN	
RB215T-60	60	60	20	100	0.58	10	0.6	60	TO-220FN	
RB225T-60	60	60	30	100	0.63	15	0.6	60	TO-220FN	
RB095T-90	90	90	6	100	0.75	3	0.15	90	TO-220FN	
RB085T-90	90	90	10	100	0.83	5	0.15	90	TO-220FN	
RB205T-90	90	90	15	100	0.78	7.5	0.3	90	TO-220FN	
RB215T-90	90	90	20	100	0.75	10	0.4	90	TO-220FN	
RB225T100	100	100	30	100	0.88	15	0.4	100	TO-220FN	

Note: *1 Value / element. *2 1/2 lo per diode.

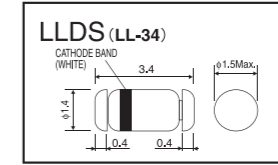
Dimensions

(Unit:mm)

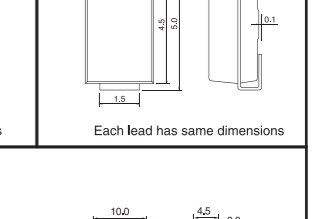
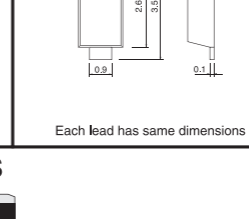
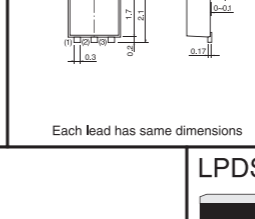
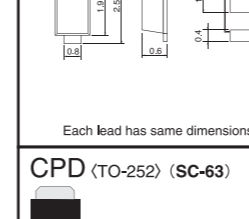
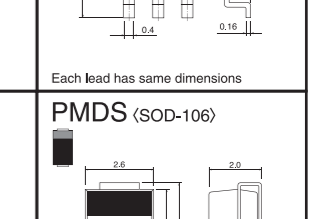
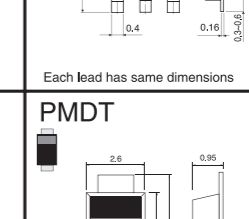
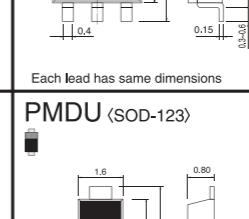
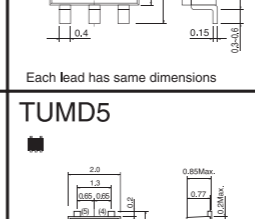
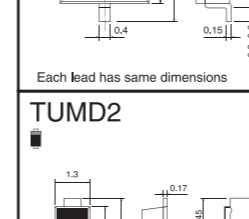
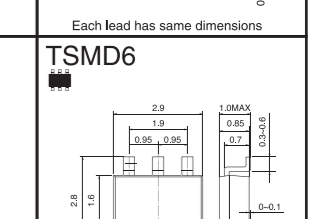
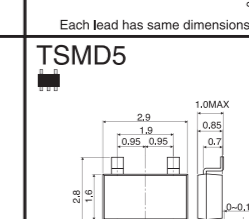
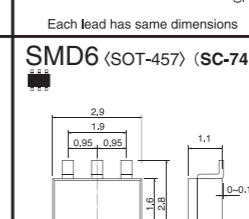
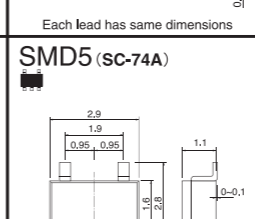
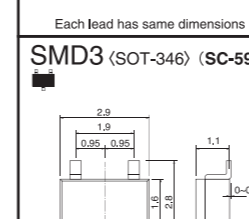
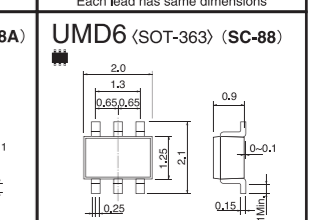
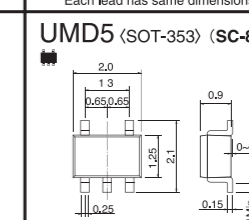
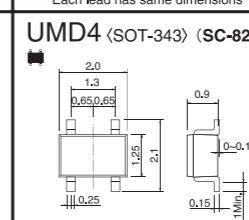
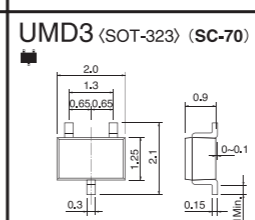
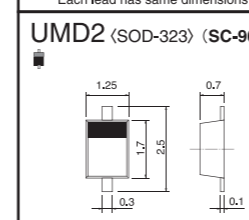
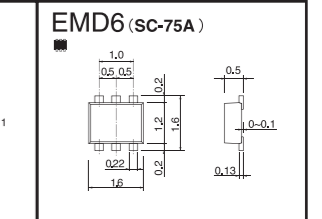
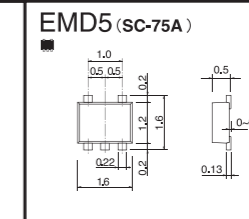
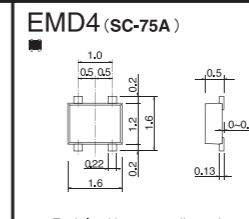
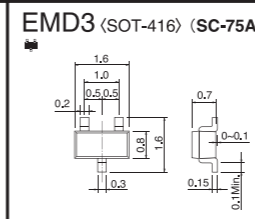
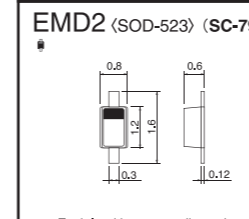
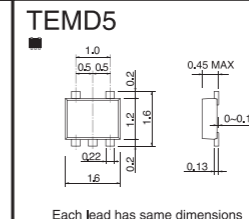
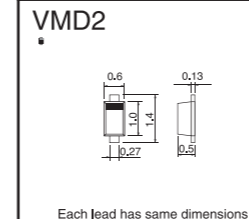
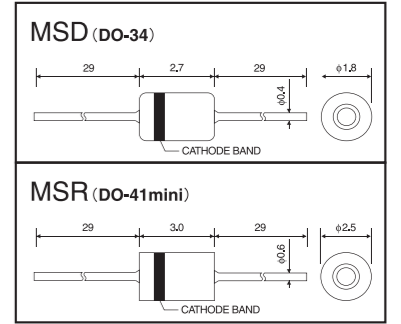
• Surface Mount Type



• Surface Mount, Glass Type



• Leaded Type



< > : JEDEC Code, () : JEITA Code

* Please see Rohm web site or specification about tolerance and spec. for details.

- The contents described herein are correct as of 1st June 2008.
- The specifications for the product described in this document are for reference only. Upon actual use, therefore, please request that specifications to be separately delivered.
- The application circuit examples, information, and various data pertaining to the use of the products presented in this documentation are provided for reference purposes only. Please note that ROHM cannot bear any responsibility regarding any problems relating to industrial property rights resulting from their use thereof.

The products listed in this catalog are designed to be used with ordinary electronic equipment or devices (such as audio visual equipment, office-automation equipment, communications devices, electrical appliances and electronic toys). Should you intend to use these products with equipment or devices which require an extremely high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), please be sure to consult with our sales representative in advance.

Contact us for further information about the products.

San Diego	TEL: +1-858-625-3630	FAX: +1-858-625-3670	Tianjin	TEL: +86-22-23029181	FAX: +86-22-23029183
Atlanta	TEL: +1-770-754-5972	FAX: +1-770-754-0691	Shanghai	TEL: +86-21-6279-2727	FAX: +86-21-6247-2066
Boston	TEL: +1-978-371-0382	FAX: +1-928-438-7164	Hangzhou	TEL: +86-571-87658072	FAX: +86-571-87658071
Chicago	TEL: +1-847-368-1006	FAX: +1-847-368-1008	Nanjing	TEL: +86-25-86889-0015	FAX: +86-25-8689-0393
Dallas	TEL: +1-469-287-5366	FAX: +1-469-362-7973	Ningbo	TEL: +86-574-87654201	FAX: +86-574-87654208
Denver	TEL: +1-303-708-0908	FAX: +1-303-708-0858	Qingdao	TEL: +86-532-5779-312	FAX: +86-532-5779-653
Detroit	TEL: +1-248-348-9920	FAX: +1-248-348-9942	Suzhou	TEL: +86-512-82702693	FAX: +86-512-82702992
Nashville	TEL: +1-615-620-6700	FAX: +1-615-620-6702	Wuxi	TEL: +86-510-82702693	FAX: +86-510-82702992
Mexico	TEL: +52-33-3123-2001	FAX: +52-33-3123-2002	Shenzhen	TEL: +86-755-8307-3008	FAX: +86-755-8307-3003
Düsseldorf	TEL: +49-2154-9210	FAX: +49-2154-921400	Dongguan	TEL: +86-769-8393-3320	FAX: +86-769-8398-4140
Munich	TEL: +49-899-216168	FAX: +49-899-216176	Fuzhou	TEL: +86-591-8801-8698	FAX: +86-591-8801-8690
Stuttgart	TEL: +49-711-72723710	FAX: +49-711-72723720	Guangzhou	TEL: +86-20-3878-8100	FAX: +86-20-3825-5965
France	TEL: +33-1-5697-3060	FAX: +33-1-5697-3080	Huizhou	TEL: +86-752-205-1054	FAX: +86-752-205-1059
United Kingdom	TEL: +44-1-908-306700	FAX: +44-1-908-235788	Xiamen	TEL: +86-592-238-5705	FAX: +86-592-239-8380
Denmark	TEL: +45-3694-4739	FAX: +45-3694-4789	Zhuhai	TEL: +86-756-3232-480	FAX: +86-756-3232-460
Espoo	TEL: +358-9725-54491	FAX: +358-9-7255-4499	Hong Kong	TEL: +852-2-740-6262	FAX: +852-2-375-8971
Salo	TEL: +358-2-7332234	FAX: +358-2-7332237	Taipei	TEL: +886-2-2500-6956	FAX: +886-2-2503-2869
Oulu	TEL: +358-8-5372930	FAX: +358-8-5372931	Kaohsiung	TEL: +86-7-237-0881	FAX: +86-7-238-7332
Barcelona	TEL: +34-9375-24320	FAX: +34-9375-24410	Singapore	TEL: +65-6332-2322	FAX: +65-6332-5662
Hungary	TEL: +36-1-4719338	FAX: +36-1-4719339	Philippines	TEL: +63-2-807-6872	FAX: +63-2-809-1422
Poland	TEL: +48-22-5757213	FAX: +48-22-5757001	Thailand	TEL: +66-2-254-4890	FAX: +66-2-256-6334
Russia	TEL: +7-95-980-6755	FAX: +7-95-937-8290	Kuala Lumpur	TEL: +60-3-7958-8355	FAX: +60-3-7958-8377
Seoul	TEL: +82-2-8182-700	FAX: +82-2-8182-715	Penang	TEL: +60-4-2286453	FAX: +60-4-2286452
Masan	TEL: +82-55-240-6234	FAX: +82-55-240-6236	Kyoto	TEL: +81-75-365-1218	FAX: +81-75-365-1228
Dalian	TEL: +86-411-8230-8549	FAX: +86-411-8230-8537	Yokohama	TEL: +81-45-476-2290	FAX: +81-45-476-2295
Beijing	TEL: +86-10-8525-2483	FAX: +86-10-8525-2489			

Excellence in Electronics



ROHM CO., LTD.

21 Saiin Mizosaki-cho, Ukyo-ku, Kyoto
615-8585, Japan
TEL: +81-75-311-2121 FAX: +81-75-315-0172
URL: <http://www.rohm.com>

