

- Moisture sensitivity level: level 1, per J-STD-020
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



Micro SMA

MECHANICAL DATA

Case: Micro SMA

Molding compound, UL flammability classification rating 94V-0

Base P/N with suffix "G" on packing code - halogen-free

Terminal: Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 1A whisker test

Polarity: Indicated by cathode band

Weight: 0.006 g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	SS13M	SS14M	SS16M
Marking code		A	B	C
Maximum repetitive peak reverse voltage	V _{RRM}	30	40	60
Maximum average forward rectified current	I _{F(AV)}	1		
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	25		
Maximum instantaneous forward voltage (Note 1) @ 0.5A / T _J =25 °C @ 0.5A / T _J =125 °C @ 1.0A / T _J =25 °C @ 1.0A / T _J =125 °C	V _F	TYP.	MAX.	TYP.
		0.45	-	0.51
		0.35	-	0.46
		0.52	0.55	0.64
Maximum reverse current @ rated VR @ T _J =25 °C @ T _J =125 °C @ T _J =150 °C	I _R	TYP.	MAX.	TYP.
		5	50	5
		3	10	3
Typical junction capacitance (Note 2)	C _j	50		40
		30		40
Typical thermal resistance	R _{θJL}	30		
	R _{θJC}	40		
	R _{θJA}	125		
Operating junction temperature range	T _J	-55 to +150		
Storage temperature range	T _{STG}	-55 to +150		

Note 1: Pulse test with PW=300µs, 1% duty cycle

Note 2: Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

Note 1: X defines voltage from 50V (SS15M) to 60V (SS16M)

Note 2: For Micro SMA: Packing code (Whole series with green compound)

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	GREEN COMPOUND CODE	DESCRIPTION
SS16M RSG	SS16M	RS	G	Green compound

RATINGS AND CHARACTERISTICS CURVES

(TA=25°C unless otherwise noted)

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

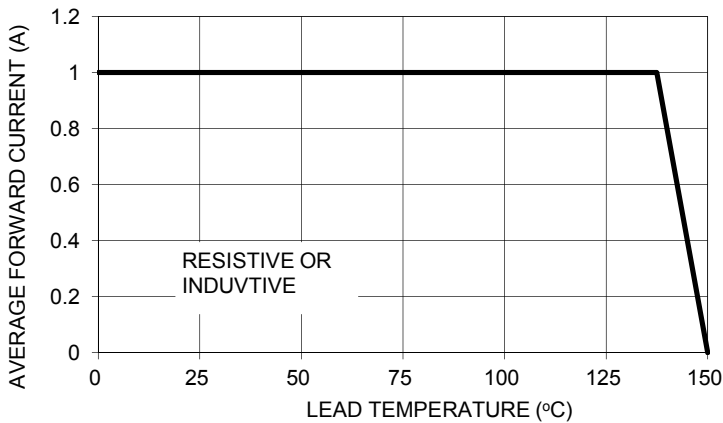


FIG. 2 MAXIMUM FORWARD SURGE

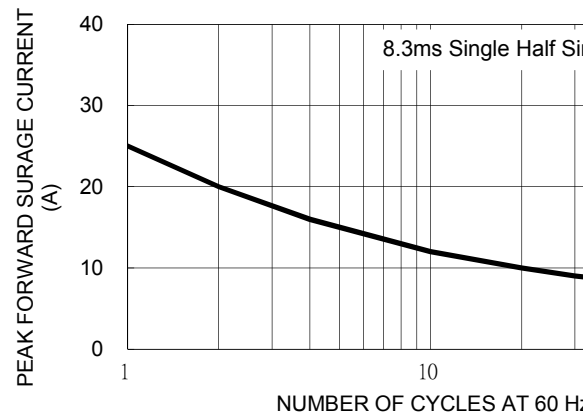


FIG. 3 TYPICAL FORWARD CHARACTERISTICS - SS13M/14M

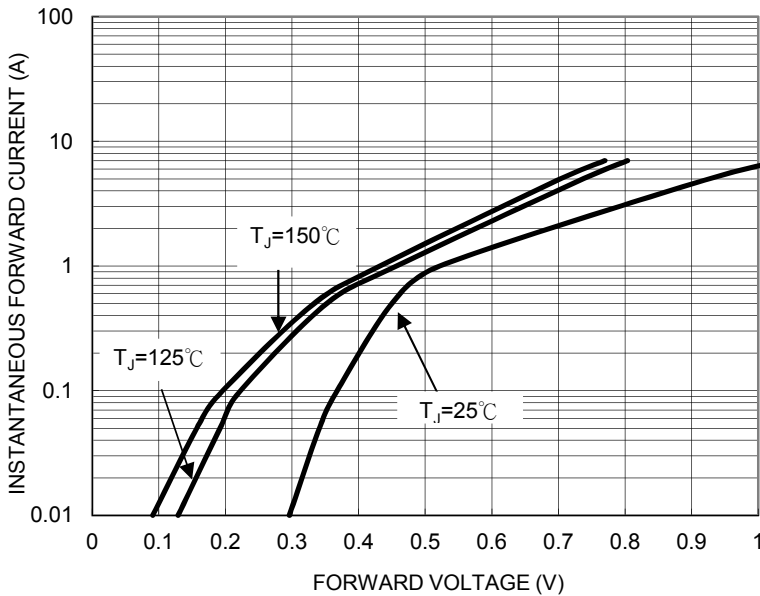
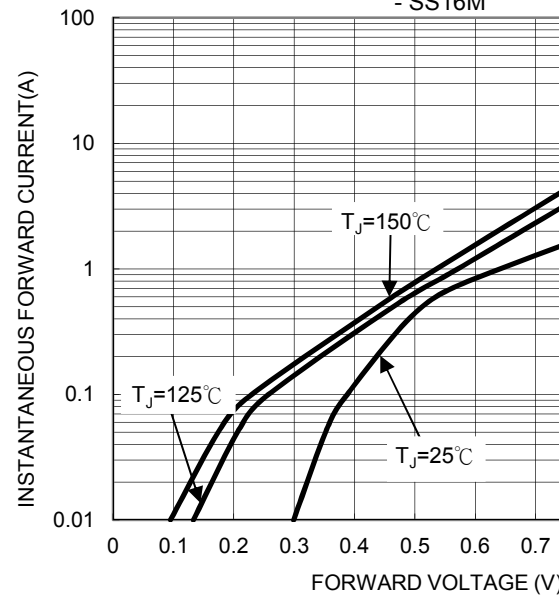


FIG. 4 TYPICAL FORWARD CHARACTERISTICS - SS16M



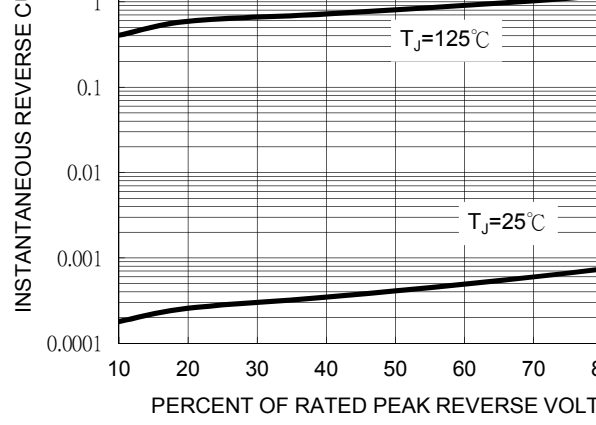
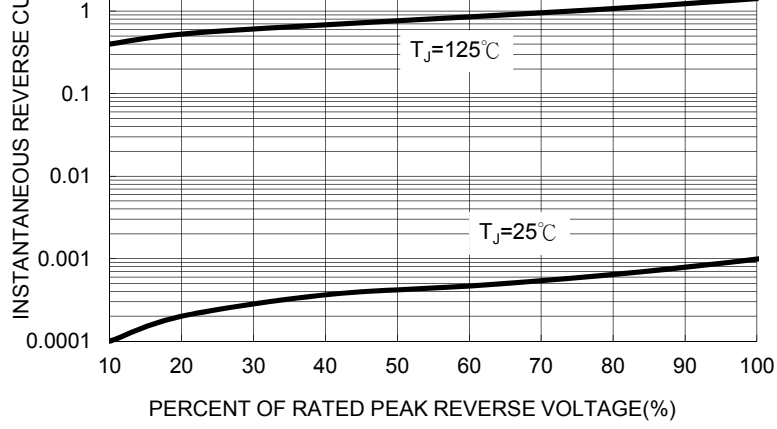


FIG. 7 TYPICAL JUNCTION CAPACITANCE

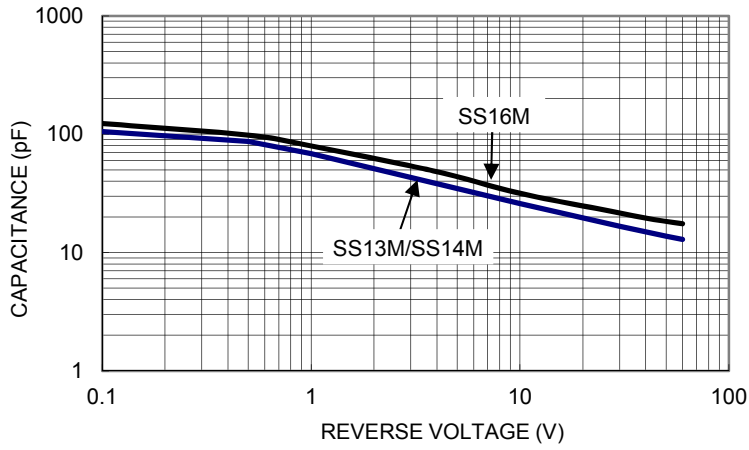
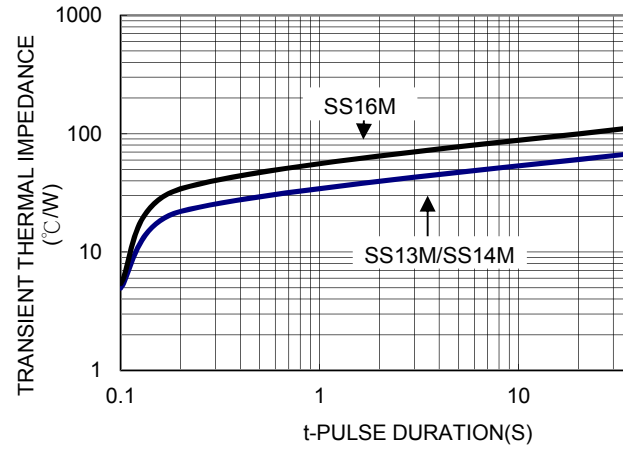
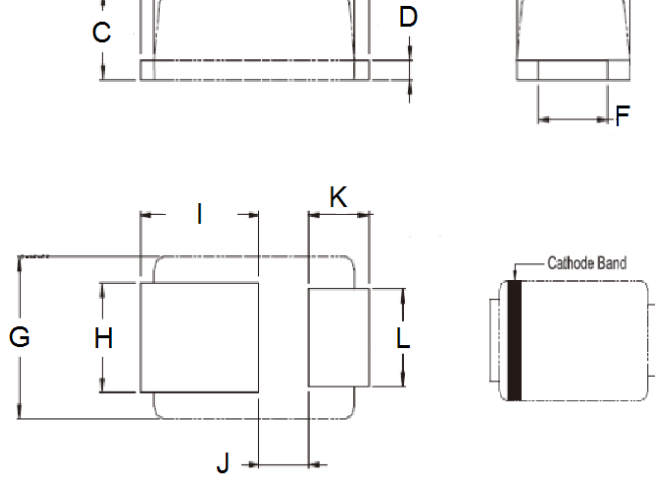


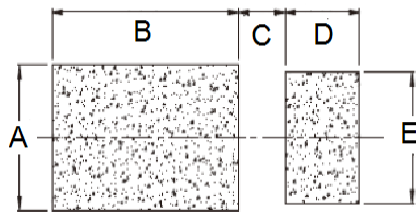
FIG. 8 TYPICAL TRANSIENT THERMAL IMPEDANCE





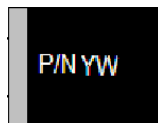
B	2.10	2.30	0
C	0.63	0.73	0
D	0.10	0.20	0
E	1.15	1.35	0
F	0.65	0.85	0
G	1.15	1.35	0
H	0.75	0.95	0
I	1.10	1.50	0
J	0.55	0.75	0
K	0.55	0.75	0
L	0.65	0.85	0

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
A	1.1	0.043
B	2.0	0.079
C	0.5	0.020
D	0.8	0.031
E	1.0	0.039

MARKING DIAGRAM



P/N = Marking code
 YW = Date Code

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