

- Ultrafast recovery time for high efficiency
- 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
- AEC-Q101 qualified



MECHANICAL DATA

Case: DO-214AB (SMC)

Molding compound, UL flammability classification rating 94V-0

Packing code with suffix "G" means green compound (halogen-free)

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

Meet JESD 201 class 2 whisker test

Weight: 0.25 g (approximately)

DO-214AB (SMC)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	MUR420S	MUR440S	MUR4
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600
Maximum RMS voltage	V_{RMS}	140	280	420
Maximum DC blocking voltage	V_{DC}	200	400	600
Maximum average forward rectified current	$I_{F(AV)}$	4		
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	75		
Maximum instantaneous forward voltage (Note 1) @ 4 A, 25°C @ 4 A, 150°C	V_F	0.875 0.710	1.25 1.05	
Maximum reverse current @ rated VR $T_J=25^\circ\text{C}$ $T_J=150^\circ\text{C}$	I_R	5 150	10 250	
Maximum reverse recovery time (Note 2)	t_{rr}	25	50	
Typical junction capacitance (Note 3)	C_J	65		
Typical thermal resistance	$R_{\theta JC}$	8.5		
	$R_{\theta JA}$	45		
Operating junction temperature range	T_J	- 55 to +175		
Storage temperature range	T_{STG}	- 55 to +175		

Note 1: Pulse Test with $PW=300\mu\text{s}$, 1% Duty Cycle

Note 2: Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

Note 3: Measured at 1 MHz and Applied Reverse Voltage of 4.0V DC

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EXAMPLE				
PREFERRED PART NO.	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
MUR460S R7	MUR460S	R7		AEC-Q101 qualified
MUR460S R7G	MUR460S	R7	G	AEC-Q101 qualified Green component

RATINGS AND CHARACTERISTICS CURVES

($T_A=25^\circ\text{C}$ unless otherwise noted)

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

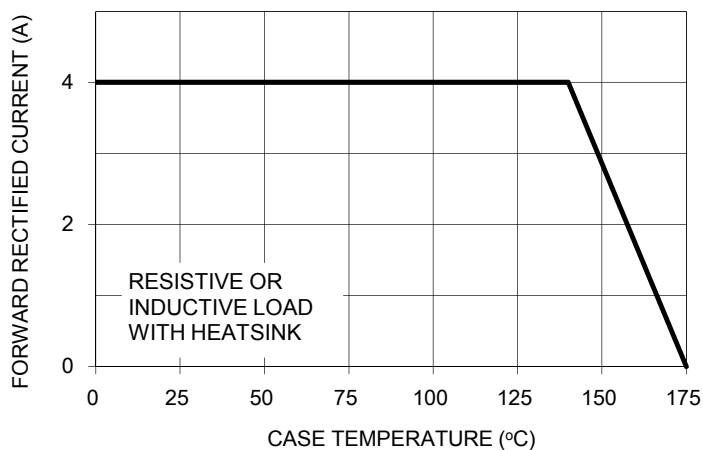


FIG. 2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

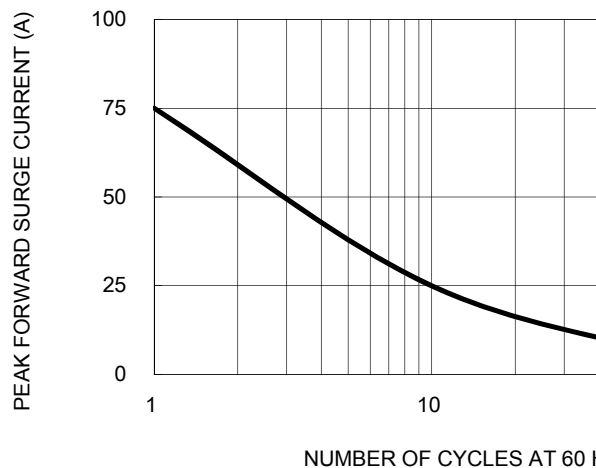


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

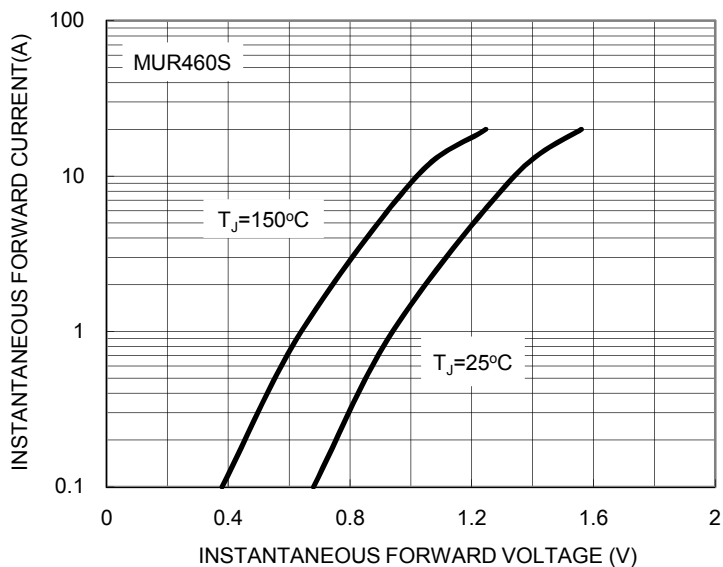
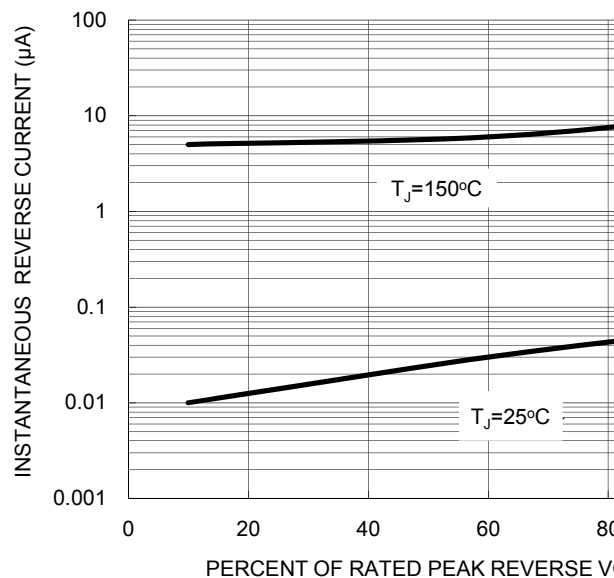
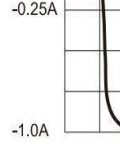
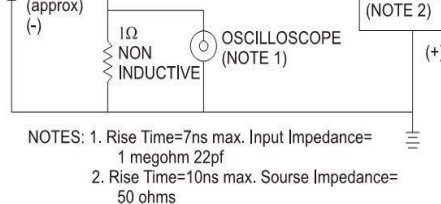
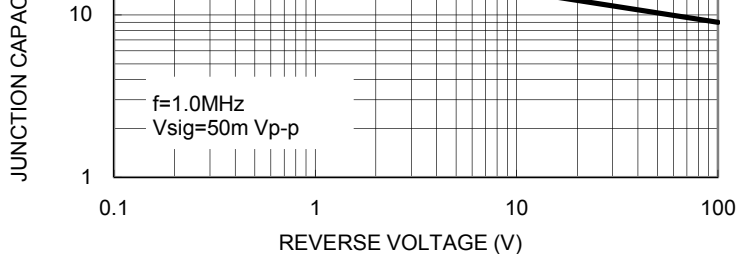


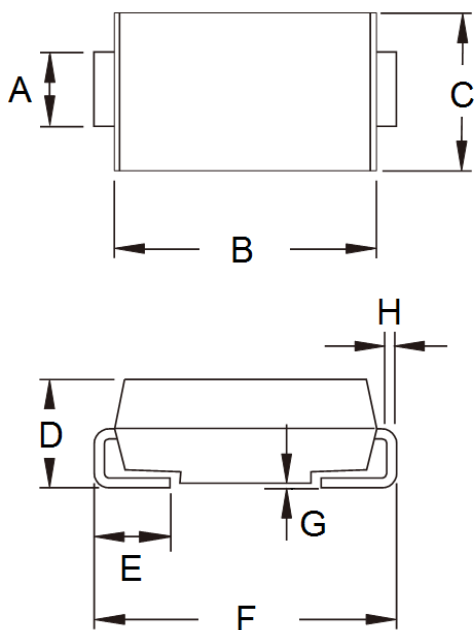
FIG. 4 TYPICAL REVERSE CHARACTERISTICS





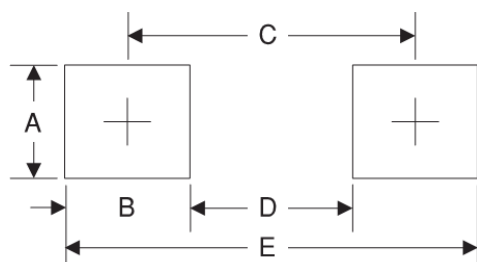
PACKAGE OUTLINE DIMENSIONS

DO-214AB (SMC)



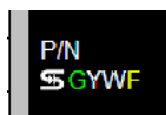
DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.90	3.20	0.114	0.126
B	6.60	7.11	0.260	0.280
C	5.59	6.22	0.220	0.245
D	2.00	2.62	0.079	0.103
E	1.00	1.60	0.039	0.063
F	7.75	8.13	0.305	0.320
G	0.10	0.20	0.004	0.008
H	0.15	0.31	0.006	0.012

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
A	3.3	0.130
B	2.5	0.098
C	6.8	0.268
D	4.4	0.173
E	9.4	0.370

MARKING DIAGRAM



- P/N = Specific Device Code
- G = Green Compound
- YW = Date Code
- F = Factory Code

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