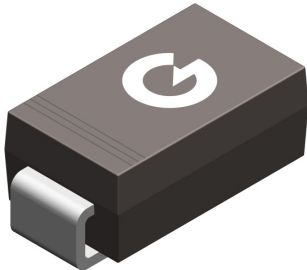


RoHS
Compliant



Features

- Metal silicon junction, majority carrier conduction
- High forward surge current capability
- Low forward voltage drop
- High temperature soldering guaranteed: 260°C @ 10s
- Robust guarding for over voltage protection

Mechanical Data

- Case: SMA molded plastic
- Molding compound: UL flammability classification rating 94V-0
- Terminals: Matte tin plated leads; solderable per J-STD-002 and JESD22-B102
- Polarity: Color band denotes cathode end

Maximum Ratings (@ TA = 25°C unless otherwise specified)

Parameter	Symbol	MP009010	MP009011	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	150	200	V
RMS Reverse Voltage	V_{RMS}	105	140	V
DC Blocking Voltage	V_{DC}	150	200	V
Maximum Average Forward Output Current	I_{F_AV}	1.0		A
Peak Forward Surge Current, 8.3ms Single Half Sine wave	I_{FSM}	35		A

Thermal Characteristics

Parameter	Symbol	MP009010	MP009011	Unit
Typical Thermal Resistance *1	$R_{\theta JA}$	70		°C/W
	$R_{\theta JC}$	25		
	$R_{\theta JL}$	30		
Operating Junction Temperature Range	T_J	-55 to +15		°C
Storage Temperature Range	T_{STG}	-55 to +150		°C

Note *1: Device mounted on p.c.b. with 10 mm × 20 mm × 0.1 mm copper pad area

Electrical Characteristics (@ TA = 25°C unless otherwise specified)

Parameter	Symbol	Test Conditions		Max.	Unit
Maximum Instantaneous Forward Voltage ^{*1}	V _F	I _F = 1.0A	@ T _A = 25°C	0.85	V
Maximum Reverse Current ^{*2}	I _R	Rated V _R	@ T _J = 25°C	250	μA
			@ T _J = 100°C	10	mA

Note*1: Pulse test: 300us pulse width, 1 % duty cycle

Note*2: Pulse test: Pulse width 40ms

Ratings and Characteristic Curves (@ TA = 25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

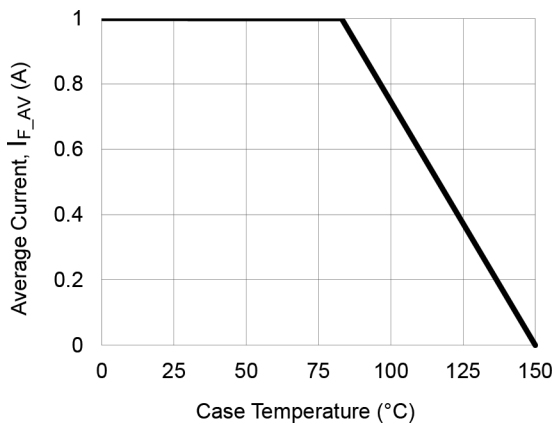


Fig.2 Surge Current Derating Curve

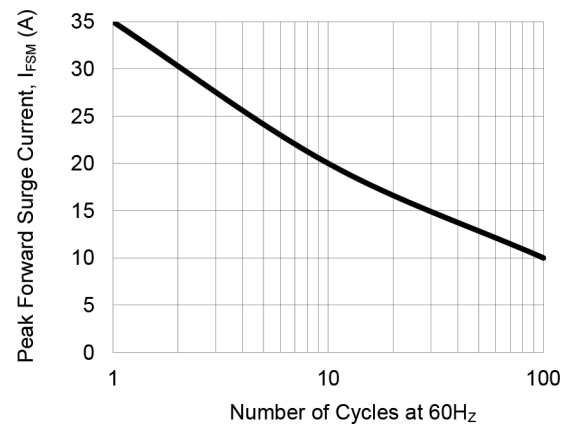


Fig.3 Typical Forward Voltage Characteristics

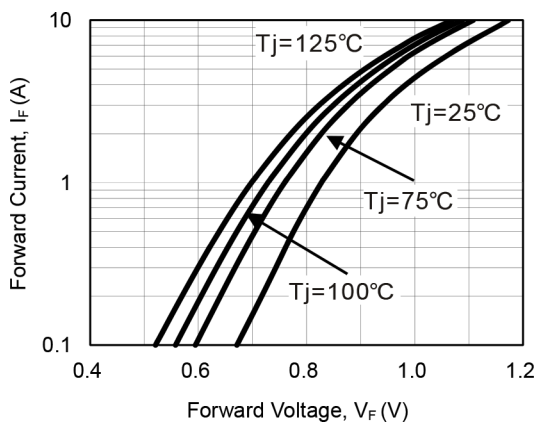
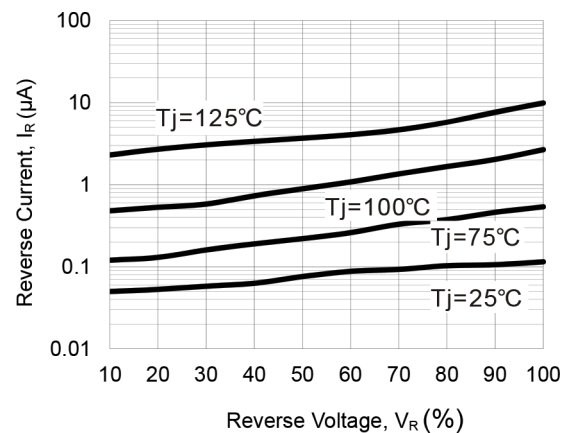
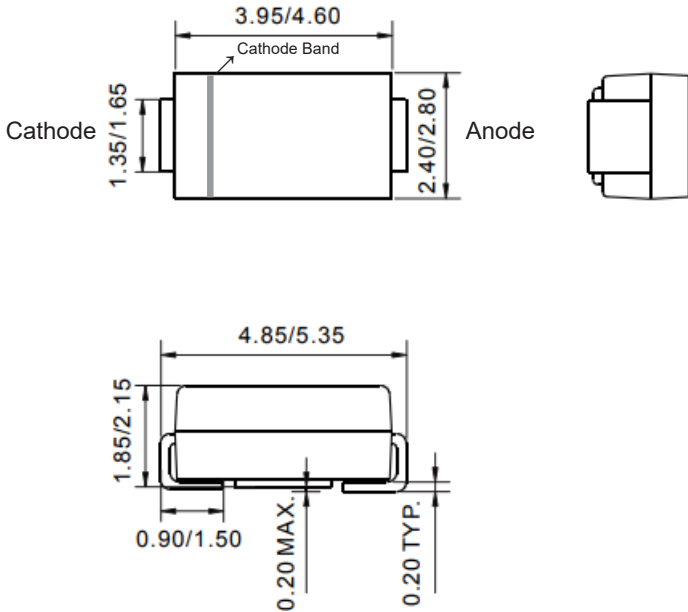


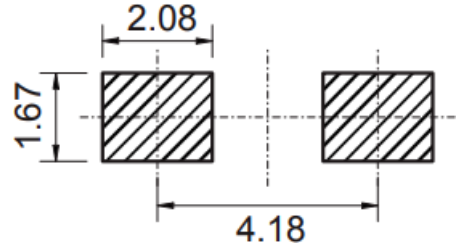
Fig.4 Typical Reverse Characteristics



Package Outline Dimensions



Mounting Pad Layout



Dimensions : Millimetres

Part Number Table

Description	Part Number
Schottky Barrier Rectifier, 1A, 150V, SMA	MP009010
Schottky Barrier Rectifier, 1A, 200V, SMA	MP009011

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