

Descriptions

This is Surface Mount General Purpose Silicon Rectifiers, Reverse Voltage: 50 to1000V,Forward Current:1.0A ,SMA package.

Features

- Glass Passivated Chip Junction,
- Lead free in comply with EU RoHS 2011/65/EU directives,
- For surface mounted applications.
- HF product.

Applications

General purpose.

Equivalent Circuit

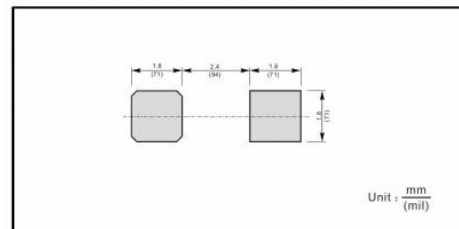


Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



Marking

See Marking Instructions.

Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating							Unit
		M1	M2	M3	M4	M5	M6	M7	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30							A
Typical Junction Capacitance at $V_R=4V$ $f=1MHz$	C_j	15							pF
Typical Thermal Resistance ¹⁾	$R_{\theta JA}$	75							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150							°C

Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Rating							Unit
			M1	M2	M3	M4	M5	M6	M7	
Maximum Instantaneous Forward Voltage	V_F	$I_F=1.0A$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25^\circ C$	5.0							μA
		$T_a=125^\circ C$	50							μA

Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

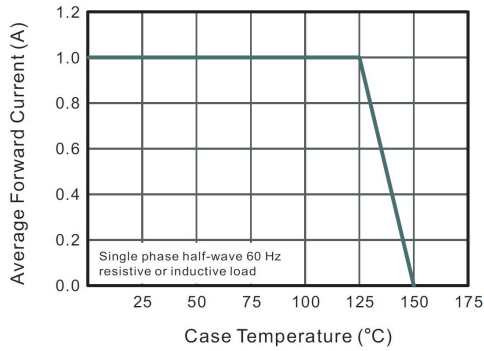


Fig.2 Typical Reverse Characteristics

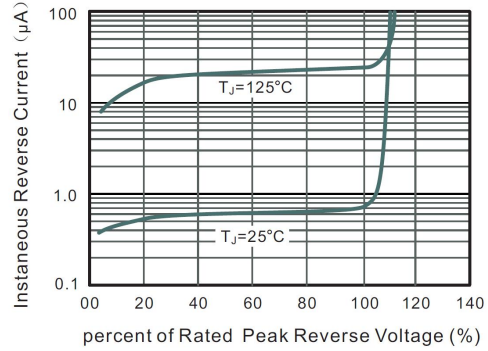


Fig.3 Typical Forward Characteristic

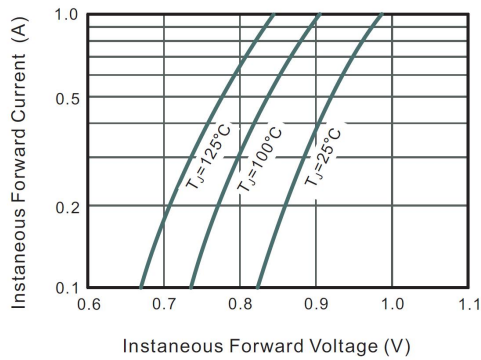


Fig.4 Typical Junction Capacitance

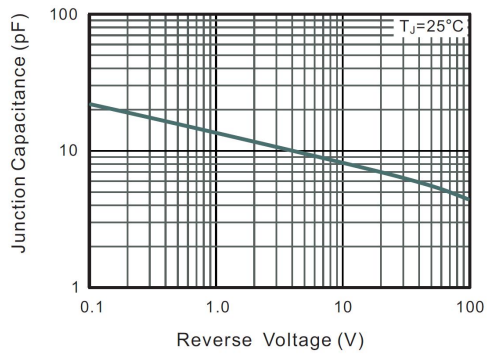
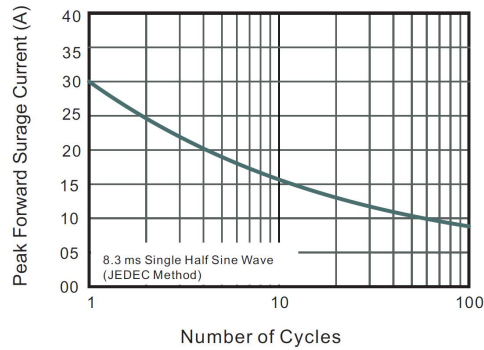


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Marking Instructions



Marking

Type number	Marking code
M1	M1
M2	M2
M3	M3
M4	M4
M5	M5
M6	M6
M7	M7

Note:

M7: Product Type Code

****: Lot No. Code, The 1st * means:YM Code, The last 3 * means:little Lot No Code

Packaging SPEC

REEL

Package Type	Units					Dimension (unit: mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SMA	5000	2	10000	7	70000	13" ×12	336X336X40	380X335X366

Package Outline Dimensions

SMA

