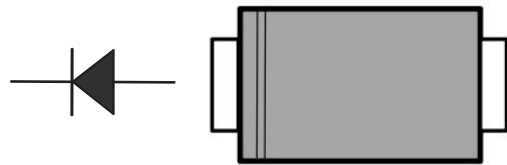


Surface Mount General Purpose Silicon Rectifiers

Parameter	Value	Unit
V_{RRM}	50~1000	V
$I_{F(AV)}$	1.0	A



DO-214AC/SMA

Features

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place

Applications

- For use in general purpose rectification in power supplies, inverters, converters, and as freewheeling diodes for consumer and telecommunications applications.

Absolute Maximum Ratings And Characteristics (at $T_J = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	M1	M2	M3	M4	M5	M6	M7	Units
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 8.3ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a=25^\circ\text{C}$							μA
		$T_a=125^\circ\text{C}$							
Typical Junction Capacitance (1)	C_j	15							pF
Typical Thermal Resistance (2)	$R_{\theta JA}$ $R_{\theta JC}$	75							$^\circ\text{C/W}$
		25							
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							$^\circ\text{C}$

Notes:

- (1) Measured at 1 MHz and applied reverse voltage of 4 V D.C
 (2) P.C.B. mounted with 8*8mm copper pad areas .

Typical Characteristics

Fig.1 Forward Current Derating Curve

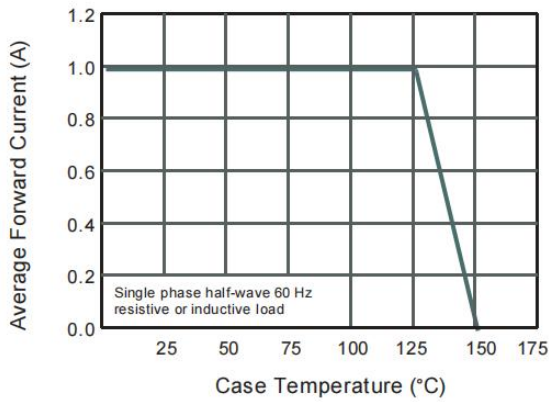


Fig.2 Typical Instantaneous Reverse Characteristics

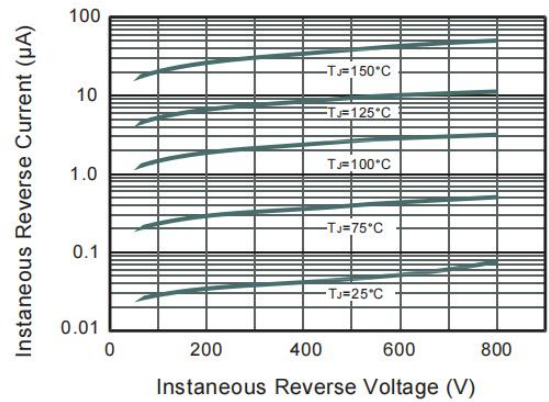


Fig.3 Typical Forward Characteristic

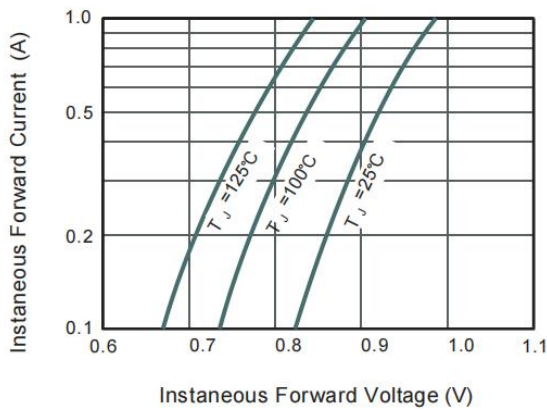


Fig.4 Typical Junction Capacitance

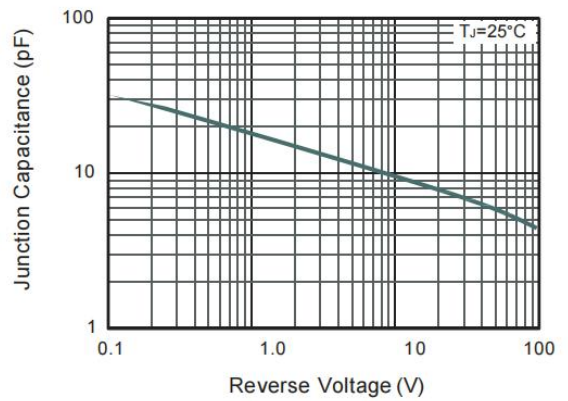


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

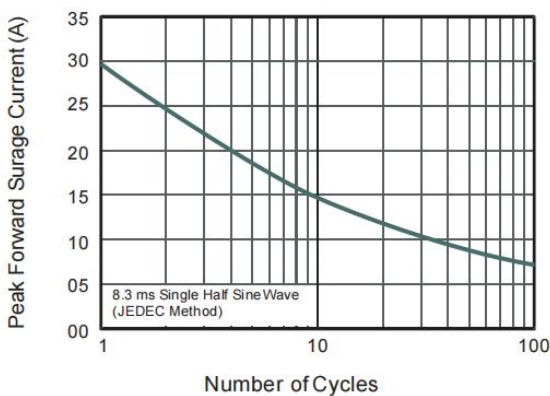
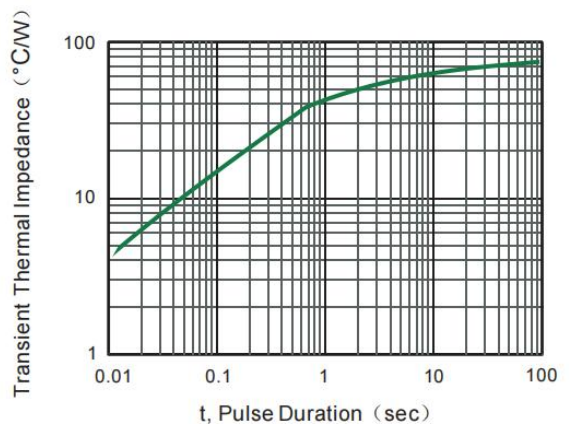


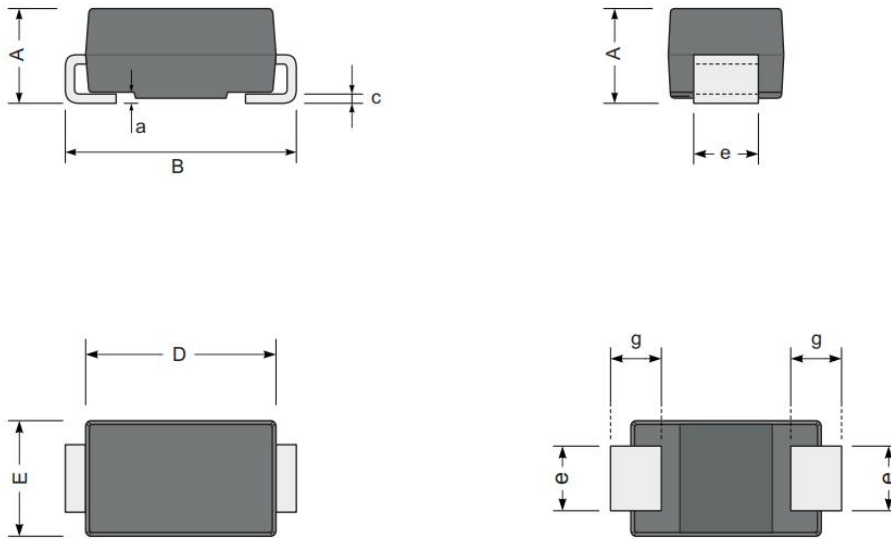
Fig.6- Typical Transient Thermal Impedance



Package Outlines

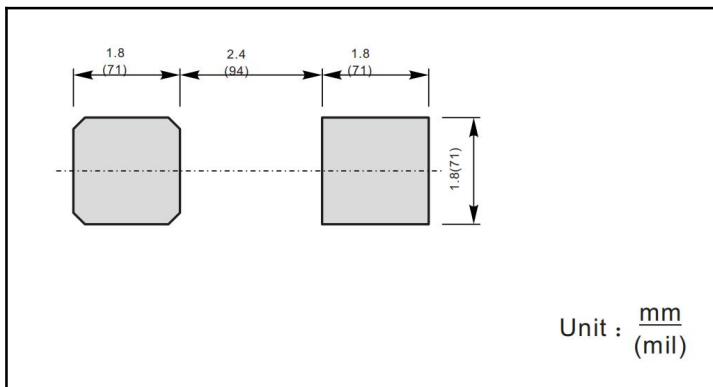
Plastic surface mounted package; 2 leads

DO-214AC/SMA



UNIT		A	D	E	B	c	e	g	a
mm	max	2.2	4.5	2.8	5.3	0.31	1.6	1.5	0.3
	min	1.9	4.0	2.4	4.8	0.15	1.3	0.9	
mil	max	87	181	110	209	12	63	59	12
	min	75	157	94	189	6	51	35	

The recommended mounting pad size



Marking

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

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