

Surface Mount General Purpose Silicon Rectifiers

Parameter	Value	Unit
V_{RRM}	50~1000	V
$I_{F(AV)}$	5.0	A



DC-214AB/SMC

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 (Ta=25°C unless otherwise noted)

Parameter	Symbol	S5A	S5B	S5D	S5G	S5J	S5K	S5M	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	$I_{F(AV)}$	5.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	150							A
Maximum Instantaneous Forward Voltage at 5A	V_F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5							μA
		100							
Typical Junction Capacitance (1)	C_j	50							pF
Typical Thermal Resistance (2)	$R_{\theta JA}$	35							$^{\circ}C/W$
	$R_{\theta JC}$	13							
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							$^{\circ}C$

(1) Measured at 1 MHz and applied reverse voltage of 4 VD.C

(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Typical characteristics

Fig.1 Forward Current Derating Curve

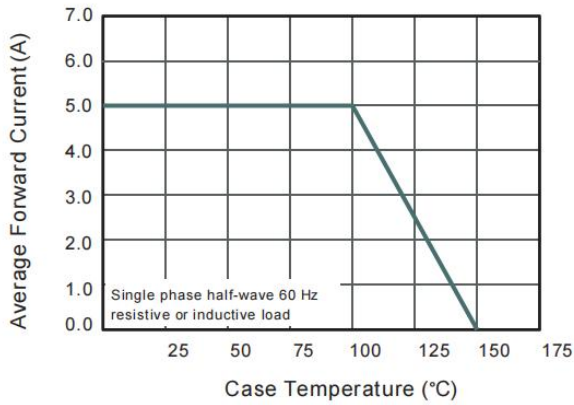


Fig.2 Typical Reverse Characteristics

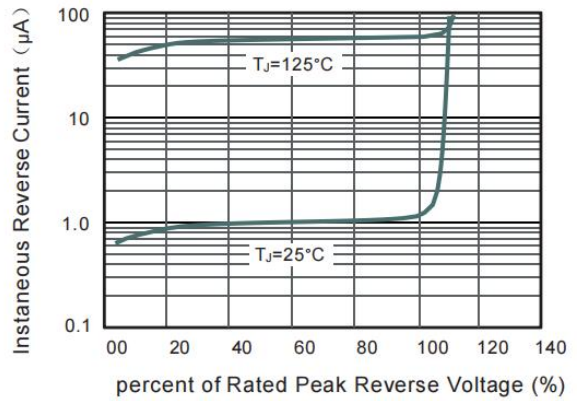


Fig.3 Typical Forward Characteristic

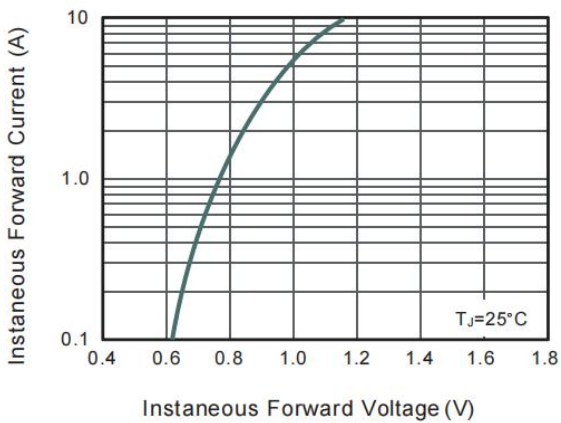


Fig.4 Typical Junction Capacitance

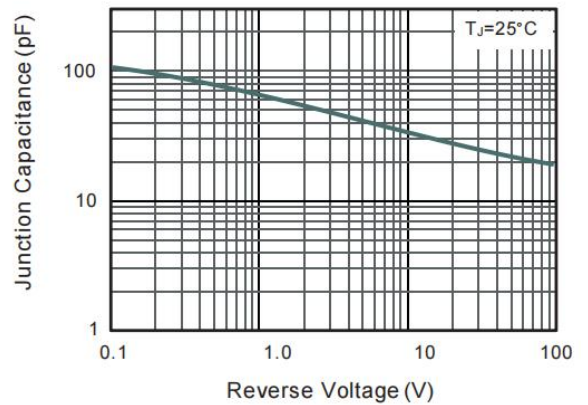
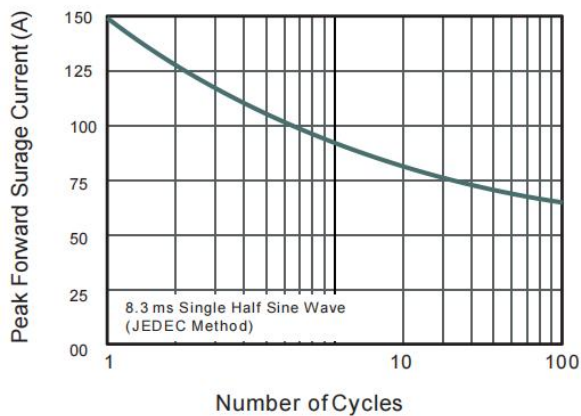


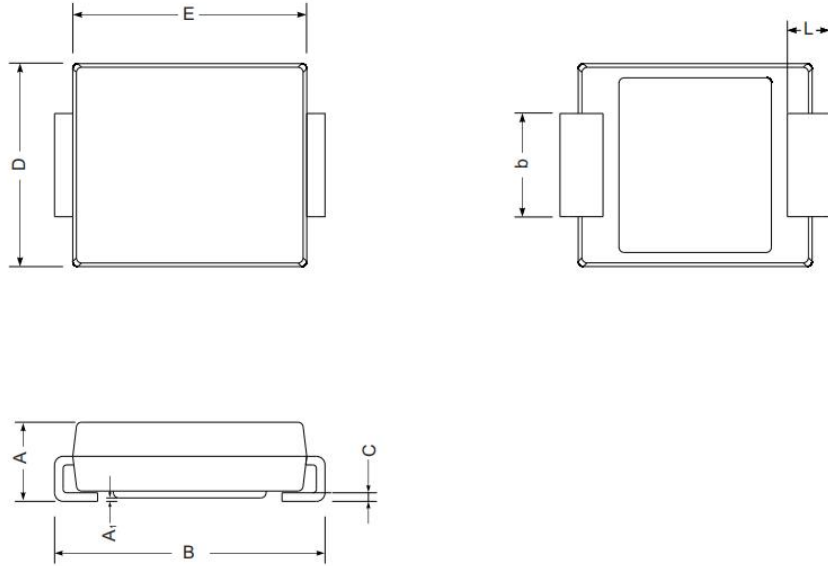
Fig.6 Maximum Non-Repetitive Peak Forward Surge Current



Package Outlines

Plastic surface mounted package; 2 leads

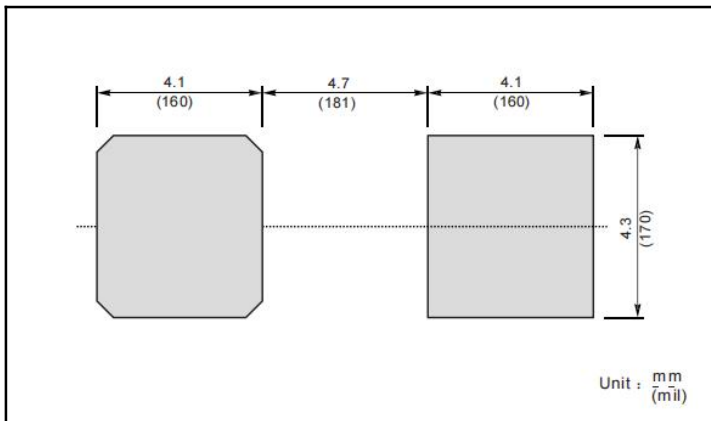
DO-214AB/SMC



SMC mechanical data

UNIT		A	E	D	B	A ₁	C	L	b
mm	max	2.62	7.1	6.2	8.3	0.21	0.31	1.6	3.25
	min	2.00	6.6	5.6	7.7	0.05	0.15	0.9	2.75
mil	max	103	280	244	327	8.3	12	63	128
	min	79	260	220	303	2.0	5.9	35	108

The recommended mounting pad size



Marking

Type number	Marking code
S5A	S5A
S5B	S5B
S5D	S5D
S5G	S5G
S5J	S5J
S5K	S5K
S5M	S5M

***Important Usage Information and Disclaimer**

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