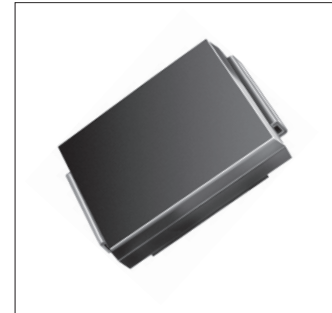


Surface Mount General Purpose Rectifier

S5A—S5M

Features

- ◆ Low profile package
- ◆ Ideal for automated placement
- ◆ Glass passivated chip junction
- ◆ High forward surge capability



Mechanical Data

Case: SMC Molded plastic body

Terminals: Plated leads solderable per MIL-STD-750,
Method 2026

High temperature soldering guaranteed: 260°C/10 seconds

Polarity: Cathode line denotes the cathode end

Mounting Position: Any

Maximum Ratings & Electrical Characteristics

Ratings at TA = 25°C unless otherwise specified

Characteristic	Symbol	S5A	S5B	S5D	S5G	S5J	S5K	S5M	Units
Peak repetitive reverse voltage	VRRM	50	100	200	400	600	800	1000	V
RMS reverse voltage	VRMS	35	70	140	280	420	560	700	V
DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward output current	IF(AV)	5							A
Peak forward surge current, 8.3ms single half-sine-wave, @TJ = 25°C	IFSM	150							A
Rating for fusing (t<8.3ms)	I2t	93.4							A2sec
Maximum instantaneous forward voltage @ 5A	VF	1.1							V
Maximum Reverse current Rated VR	IR	10							μA
		250							

Thermal Characteristics

Characteristic	Symbol	S5A	S5B	S5D	S5G	S5J	S5K	S5M	Units
Typical thermal resistance (Note 1)	R θJA	55							°C/W
	R θJC	15							
	R θJL	10							
Operating junction temperature range	TJ	- 55 ---- + 150							°C
Storage temperature range	TSTG	- 55 ---- + 150							°C

Note

(1) Units mounted on PCB with 10 mm x 20mmx0.1mm Copper Pads

Surface Mount General Purpose Rectifier

S5A- S5M

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

Fig.1-Forward Current Derating Curve

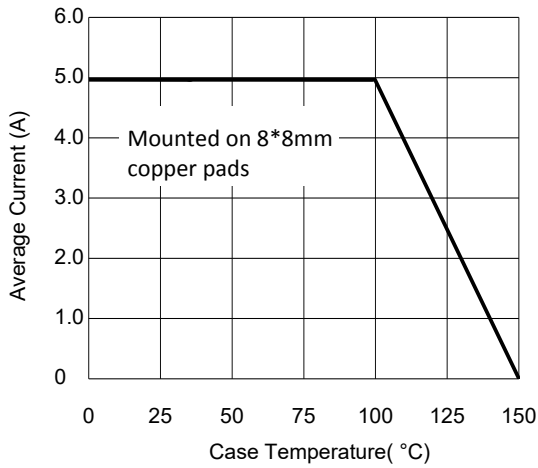


Fig.2- Surge Current Derating Curve

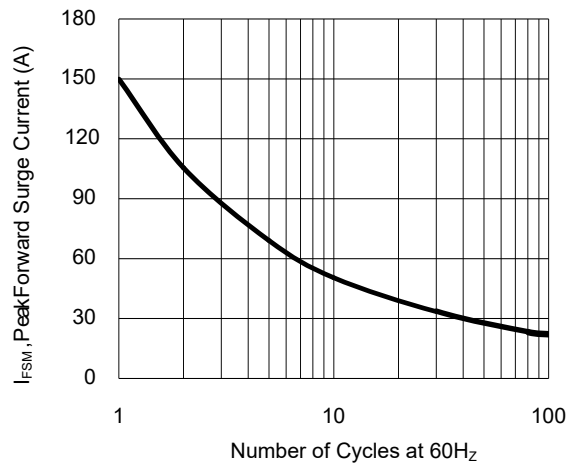


Fig.3- Typical Forward Voltage Characteristic

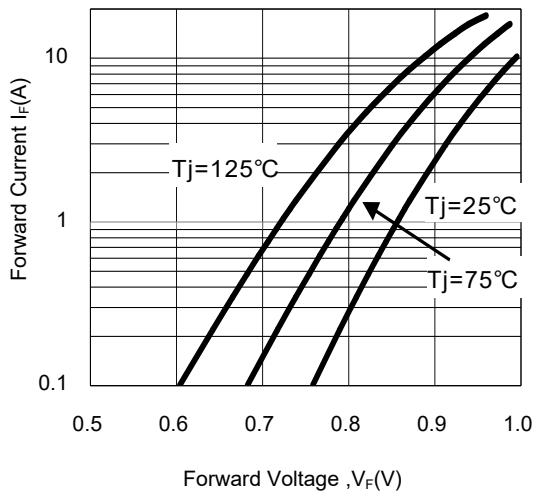
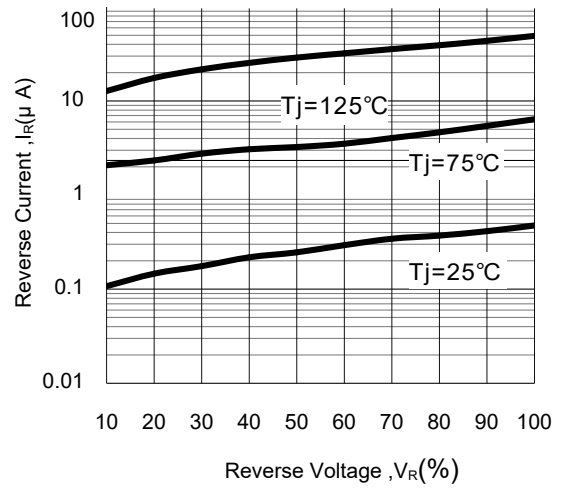


Fig.4- Typical Reverse Characteristic

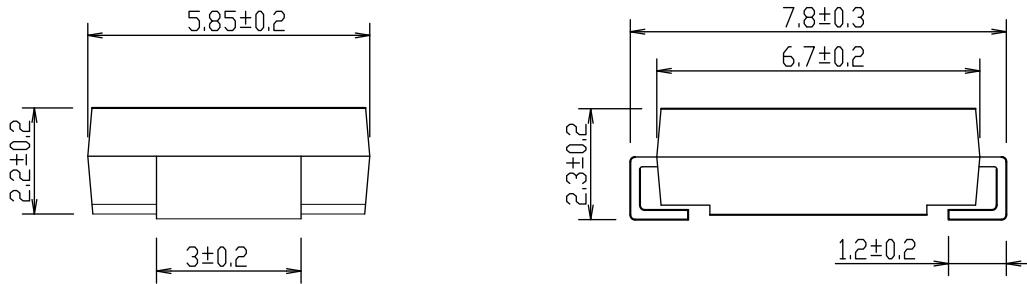


Surface Mount General Purpose Rectifier

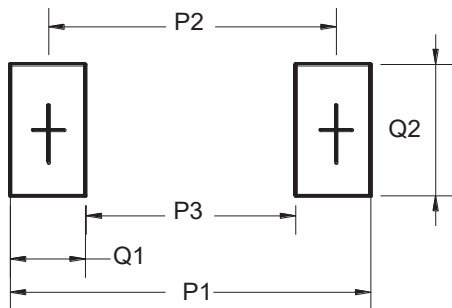
S5A- S5M

Package Outline Dimensions(unit:mm)

DO-214AB (SMC)



Mounting Pad Layout(unit:mm)



Dim	Millimeters
P1	9.80
P2	6.80
P3	3.80
Q1	3.00
Q2	4.00

Ordering Information

Part No.	Marking	Package	Shipping
S5A	S5A	SMC	3000PCS /Tape&Reel
S5B	S5B	SMC	3000PCS /Tape&Reel
S5D	S5D	SMC	3000PCS /Tape&Reel
S5G	S5G	SMC	3000PCS /Tape&Reel
S5J	S5J	SMC	3000PCS /Tape&Reel
S5K	S5K	SMC	3000PCS /Tape&Reel
S5M	S5M	SMC	3000PCS /Tape&Reel