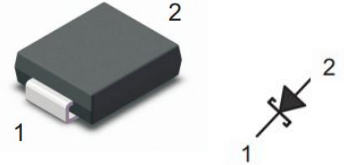
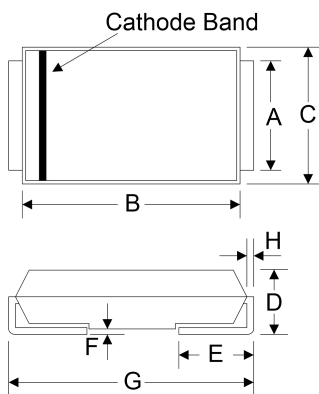


Features

- ◆ Glass Passivated Die Construction
- ◆ Low Forward Voltage Drop
- ◆ High Current Capability
- ◆ Surge Overload Rating to 200A Peak
- ◆ For surface mounted applications to optimize board space
- ◆ Meets MSL level 1, per J-STD-020
- ◆ Meet Halogen free and RoHS compliant
- ◆ Plastic package has underwriters laboratory flammability 94V-0
- ◆ High temperature soldering guaranteed: 260°C/30 seconds at terminals
- ◆ Polarity: Cathode Band or Cathode Notch



Dimensions (DO-214AB/SMC)



Ref.	Millimeters		Inches	
	Min	Max	Min.	Max.
A	2.90	3.20	0.114	0.126
B	6.60	7.11	0.260	0.280
C	5.59	6.22	0.220	0.245
D	2.06	2.62	0.079	0.103
E	0.76	1.52	0.030	0.060
F	-	0.203	-	0.008
G	7.75	8.130	0.305	0.320
H	0.152	0.305	0.006	0.012
I	3.30	-	0.129	-
J	2.40	-	0.094	-
K	-	4.20	-	0.165

Maximum Ratings and Electrical Characteristics($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	S8KC	S8MC	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	560	700	V
Average Rectified Output Current	$I_{F(AV)}$	8.0		A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	200		A
Maximum Forward Voltage @ $I_F = 8.0\text{A}$	V_{FM}	0.985		V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ @ $T_A = 125^\circ\text{C}$	I_R	10 250		μA
Typical Total Capacitance (Note 1)	C_J	45		pF
Typical Thermal Resistance, Junction to Terminal (Note 2)	$R_{\theta JA}$ $R_{\theta JC}$	35 13		$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55~+150		$^\circ\text{C}$

Notes:

- 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
- 2.P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

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

Figure 1. Forward Current Derating Curve

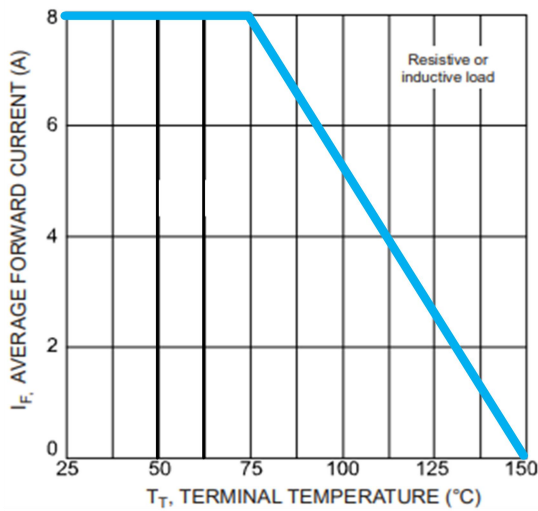


Figure 2. Typical Forward Characteristics

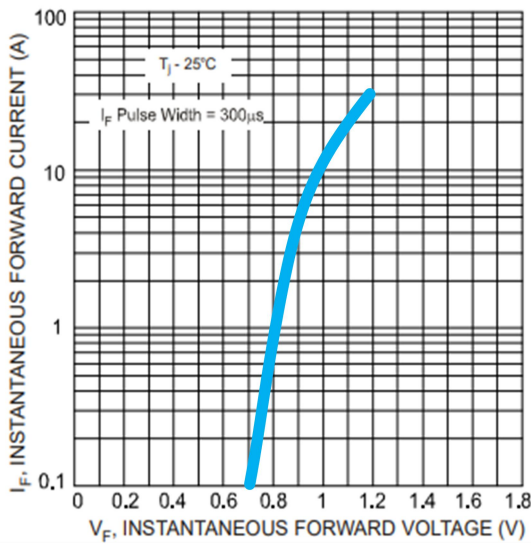


Figure 3. Forward Surge Current Derating Curve

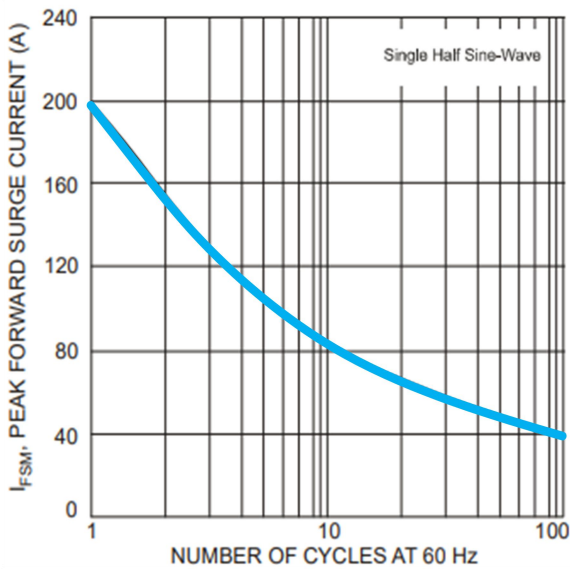
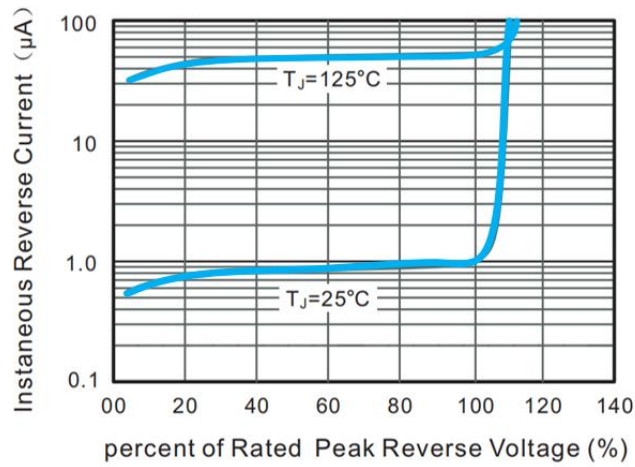


Figure 4. Typical Reverse Characteristics



Reflow Soldering Parameters

