

Major Ratings and Characteristics

$I_{F(AV)}$	2.0 A
V_{RRM}	50 V to 600 V
I_{FSM}	50 A
t_{rr}	35 nS
V_F	0.95 V, 1.25 V, 1.7 V
$T_J \text{ max.}$	150 °C



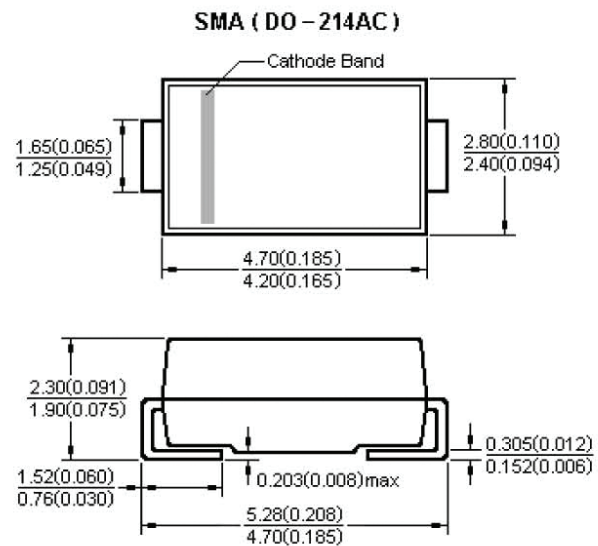
SMA (DO-214AC)

Features

- Glass passivated chip junctions
- Ideal for automated placement
- Ultrafast reverse recovery time for high efficiency
- Low profile package
- High forward surge capability
- High temperature soldering: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/1 and WEEE 2002/96/EC

Mechanical Data

- **Case:** JEDEC DO-214AC molded plastic body over passivated chip
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Polarity:** Laser band denotes cathode end



Dimensions in millimeters and (inches)

Maximum Ratings & Thermal Characteristics & Electrical Characteristics

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

	Symbol	ES2A /SMA	ES2B /SMA	ES2C /SMA	ES2D /SMA	ES2E /SMA	ES2G /SMA	ES2J /SMA	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	420	V
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	600	V
Maximum average forward rectified current	I _{F(AV)}	2							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	50							A
Maximum instantaneous forward voltage at 2.0A	V _F	0.95				1.25		1.70	V
Maximum DC reverse current at Rated DC blocking voltage	I _R	5.0							μA
T _A = 25 °C T _A = 100°C		100							
Maximum reverse recovery time at I _F = 0.5 A , I _R = 1.0 A , I _{rr} = 0.25 A	t _{rr}	35							nS
Typical junction capacitance at 4.0 V ,1MHz	C _J	18							p F
Typical thermal resistance(Note 1)	R _{θJL}	25							°C/ W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150							°C

Note 1: Units mounted on P.C.B. 5.0 * 5.0 mm (0.013 mm thick) land areas

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

Fig.1 Forward Current Derating Curve

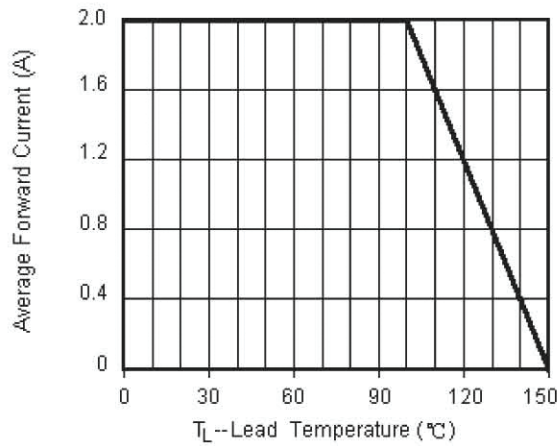


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

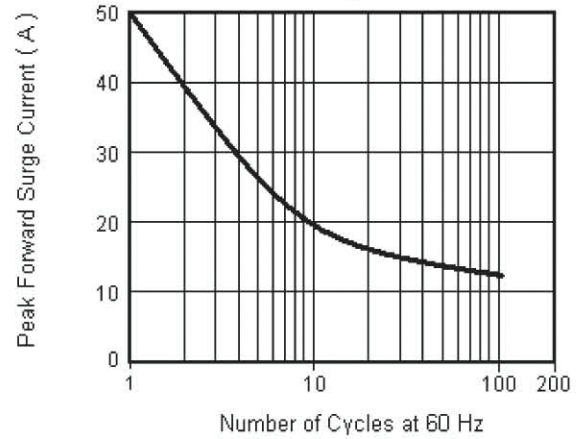


Fig.3 Typical Instantaneous Forward Characteristics

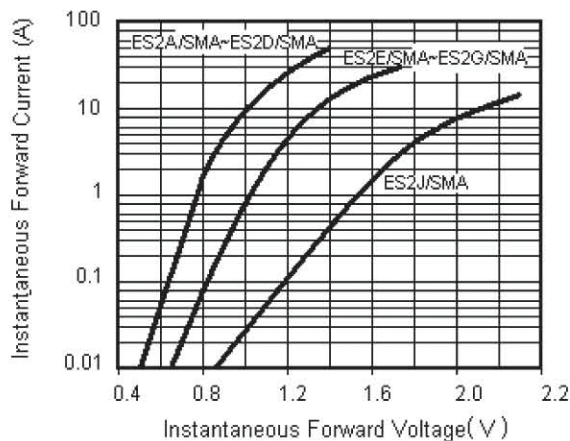


Fig.4 Typical Reverse Leakage Characteristics

