

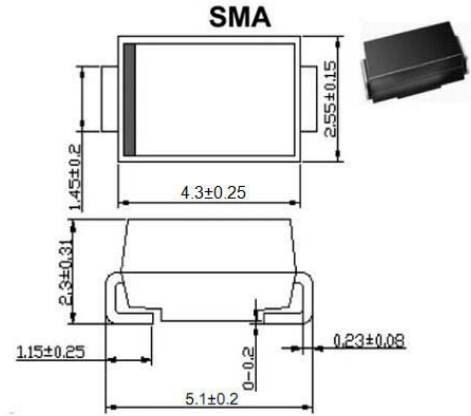
3A GLASS PASSIVATED SURFACE MOUNT RECTIFIER
 Reverse Voltage 50 to 1000 Volts
 Forward Current 3.0 Amperes

Features

- Glass passivated junction
- Low forward voltage drop
- High current capability
- Low reverse leakage
- High surge current capability
- High reliability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- AEC-Q101 qualified

Mechanical Data

- Case: SMA molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.065 grams (approximate)



Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	S3A	S3B	S3D	S3G	S3J	S3K	S3M	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
Average Rectified Output Current 0.375" (9.5mm) lead length	I_o	3.0							A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	90							A
Maximum instantaneous forward voltage at I_o	V_F	1.1							V
Maximum DC reverse current at rated DC blocking voltage	I_R	5.0 200							μA
Typical junction capacitance (Note 1)	C_j	50							pF
Typical thermal resistance (Note 2)	R_{JA}	70							°C/W
Operating junction temperature range	T_J	-55 to +150							°C
Storage temperature range	T_{STG}	-55 to +150							°C

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. Thermal Resistance from Junction to Ambient 0.375"(9.5mm) lead length.

Ratings and Characteristic Curves

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

Fig.1- Forward Current Derating Curve

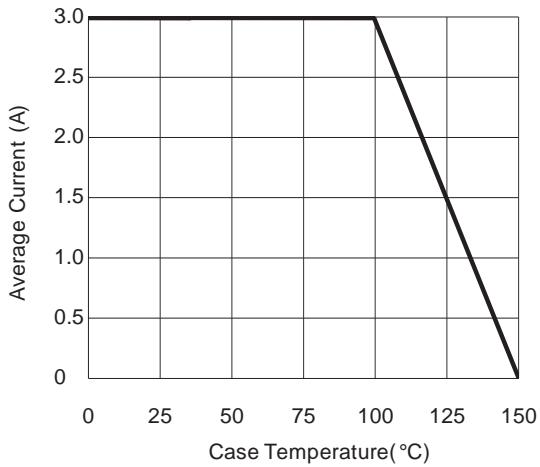


Fig.2- Surge Current Derating Curve

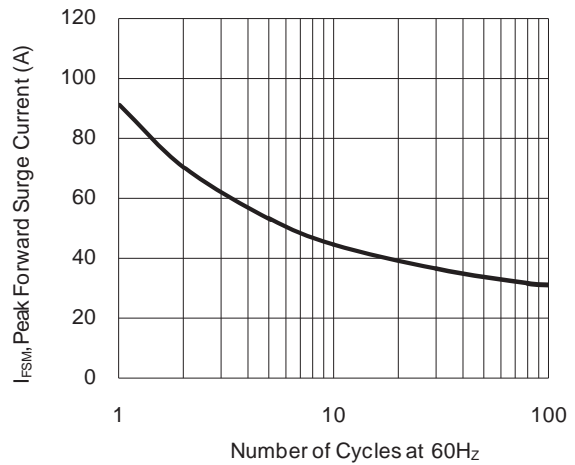


Fig.3- Typical Forward Voltage Characteristic

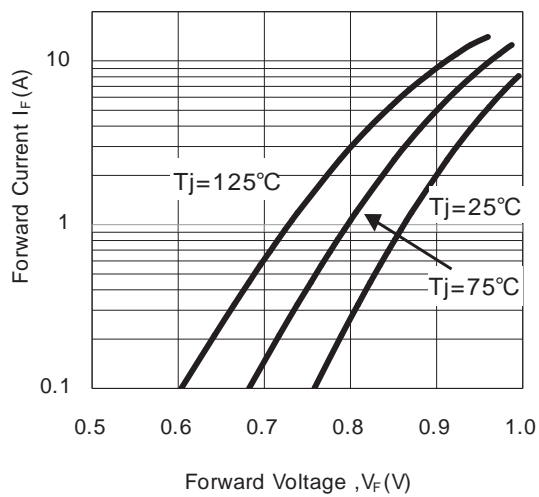


Fig.4- Typical Reverse Characteristic

