

PLASTIC SILICON RECTIFIERS

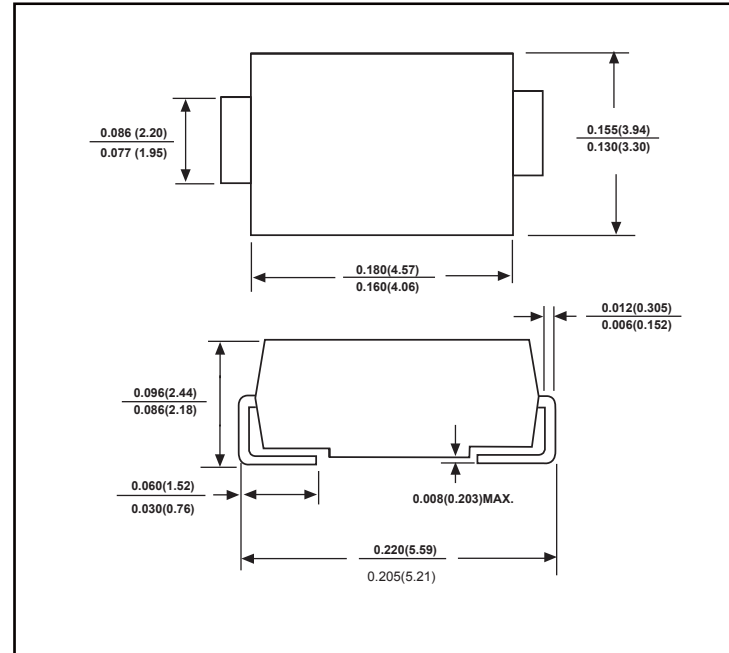
VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 3.0 A

FEATURES

- Lead free finish/Rohs compliant (Note 1)(“P” suffix designates compliant. See ordering information)
- Low forward voltage drop and high current capability
- Glass passivated die construction
- Surge over load rating to 100A peak
- Ideally suited for automatic assembly
- Epoxy meets UL 94V-0 flammability rating
- Moisture sensitivity level 1

MECHANICAL DATA

- Case:SMB molded plastic body
- Terminals: Solder Plated Terminal-Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase,half wave,60 Hz,resistive or inductive load.

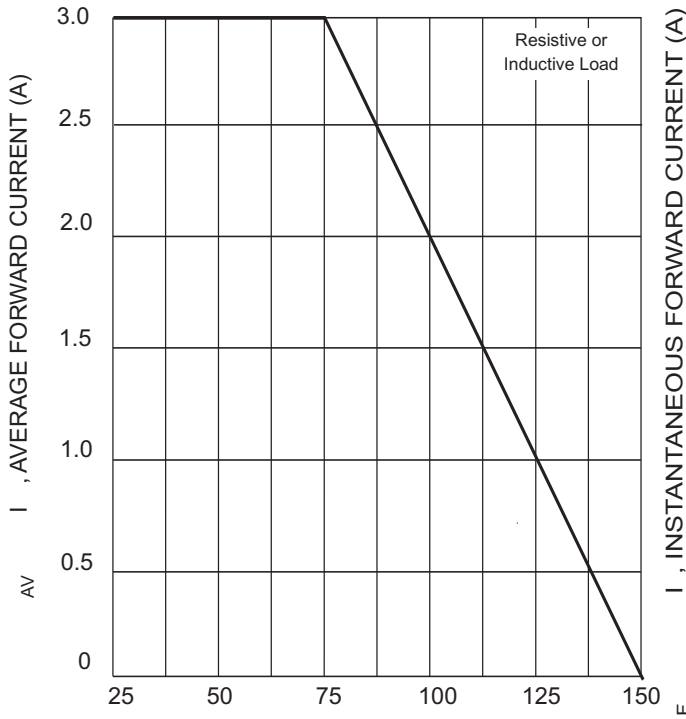
For capacitive load,derate by 20%.

		SYMBOLS	S3A	S3B	S3D	S3G	S3J	S3K	S3M	UNIT
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V _{DC}	50	100	200	400	600	800	1000	Volts
Average Forward Current T _J =75°C		I _O	3.0							Amps
Peak Forward Surge Current 8.3ms, half sine		I _{FSM}	100							Amps
Maximum Instantaneous Forward Voltage I _{FM} =3.0A T _J =25°C		V _F	1.15							Volts
Maximum DC Reverse Current at rated DC blocking voltage	T _J =25°C	I _R	10							µA
	T _J =125°C		250							µA
Typical Junction Capacitance Measured at 1.0MHZ, V _R =4.0V		C _J	40							pF

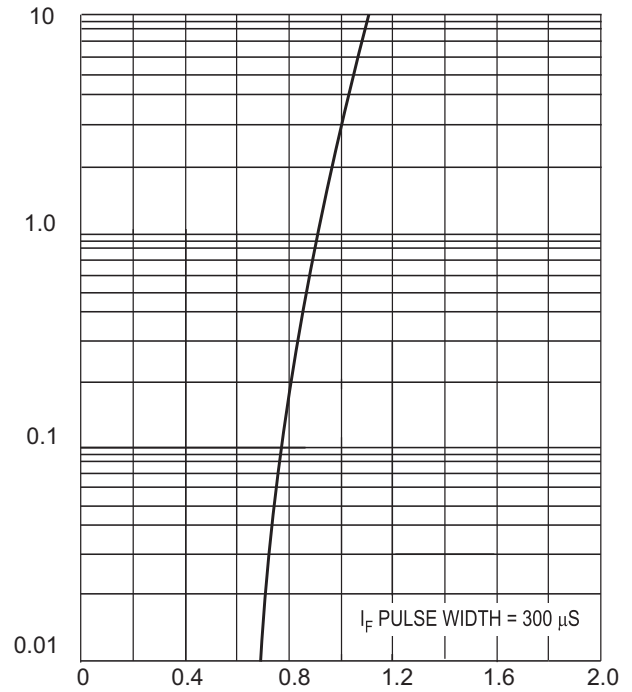
NOTES:

1. High Temperature Solder Exemptions Applied, see EU Directive Annex 7.

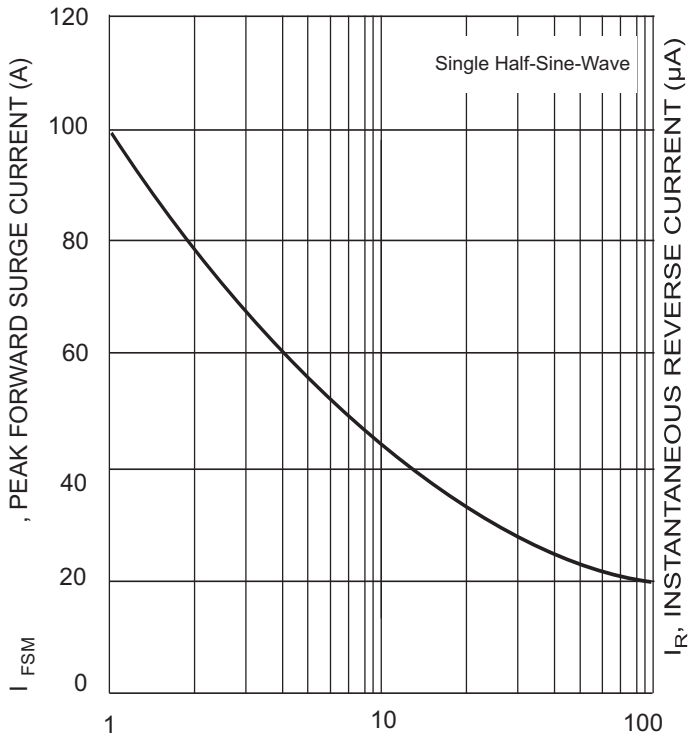
RATINGS AND CHARACTERISTIC CURVES



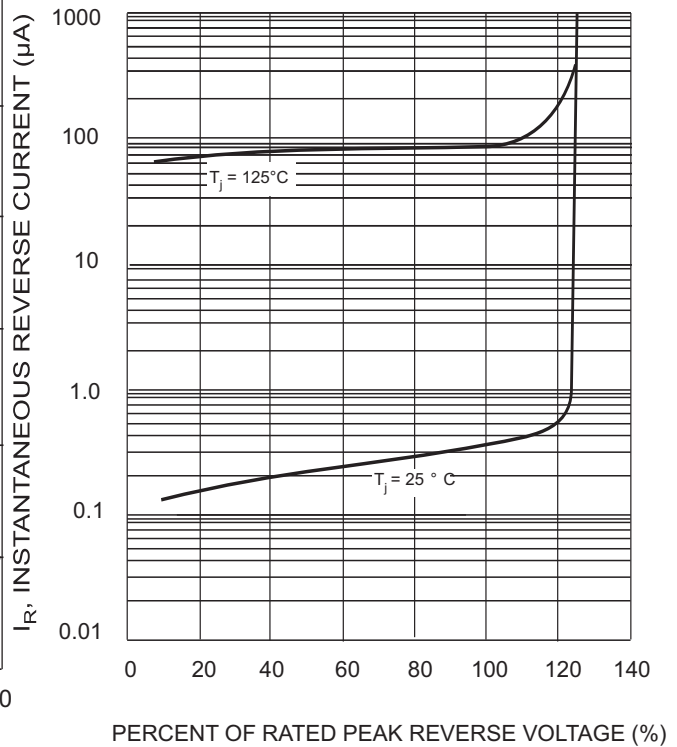
T_T , TERMINAL TEMPERATURE ($^{\circ}C$)
Fig. 1 Forward Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Forward Surge Current Derating Curve



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 4 Typical Reverse Characteristics