

General Purpose Rectifiers

REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 3 Amperes

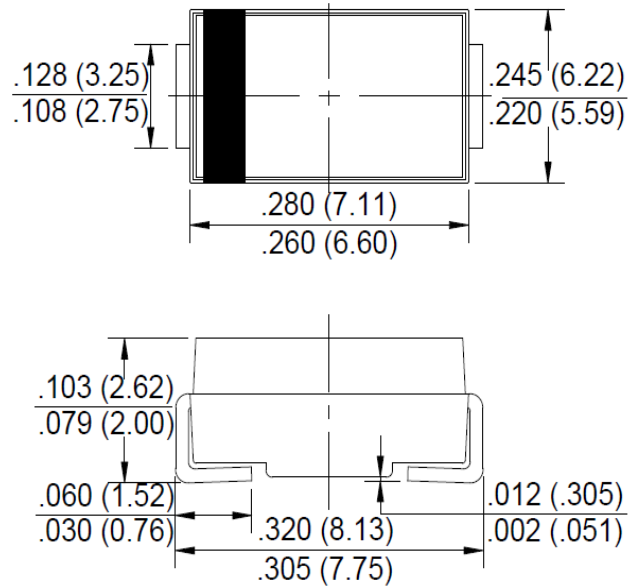
FEATURES

- Glass Passivation Junction.
- High current capability.
- High surge current capability.
- Low reverse current.
- Comply with AEC-Q101

MECHANICAL DATA

- Case: SMC, molded plastic
- Epoxy: UL flammability classification rate 94V-0 .
- Terminals: Lead free plating (Tin finish).
-Solderable per MIL-STD-202, Method 208.
- Polarity: cathode band.
- Weight: 0.231 grams (approx.).

SMC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load 60Hz.

For capacitive load, derate current by 20%

Parameter	Symbol	S3A	S3B	S3D	S3G	S3J	S3K	S3M	Unit
	Marking	301	302	303	304	305	306	307	
Max. repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Max. RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Max. DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Max. average forward rectified current	I _F	3							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	100							A
Max. instantaneous forward voltage I _F = 3A @ 25°C	V _F	1.15							V
Max. DC reverse current at rated DC blocking voltage T _A =25°C T _A =100°C	I _R	5 50							uA
Typical junction capacitance (Note 1)	C _J	20							pF
Typical thermal resistance	R _{θJC}	20							°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 1.0MHz and applied reverse voltage of 4.0V DC.

Fig.1 - Typical Forward Current Derating Curve

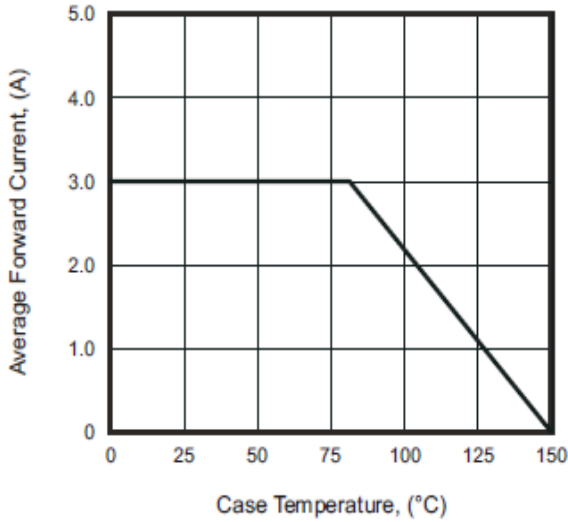


Fig.2 - Typical Forward Characteristics

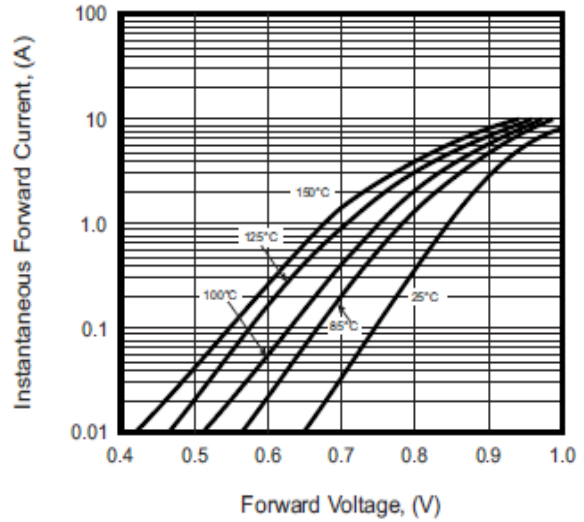


Fig.3 - Maximum Non-Repetitive Forward Surge Current

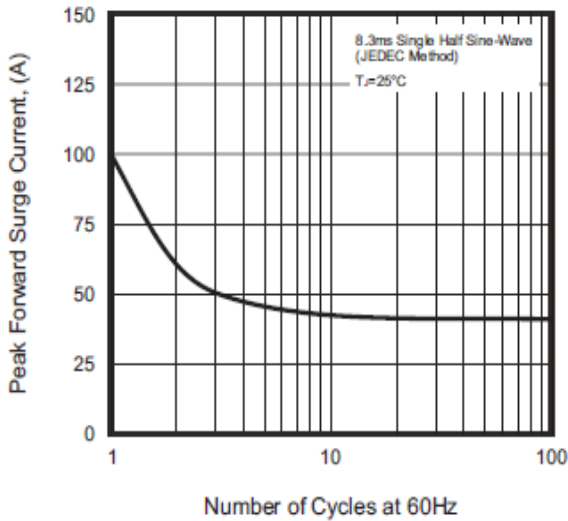


Fig.4 - Typical Reverse Characteristics

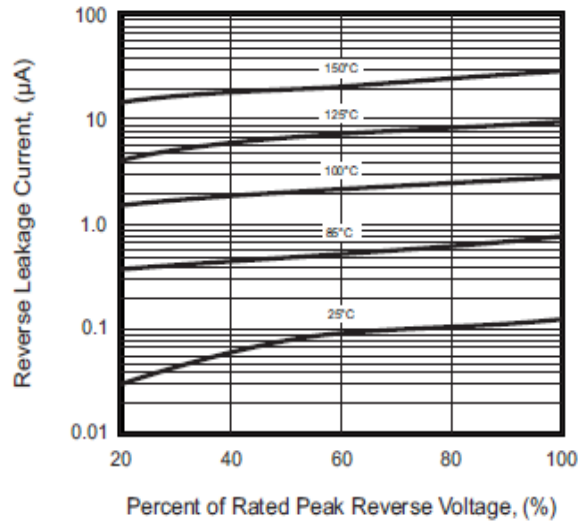
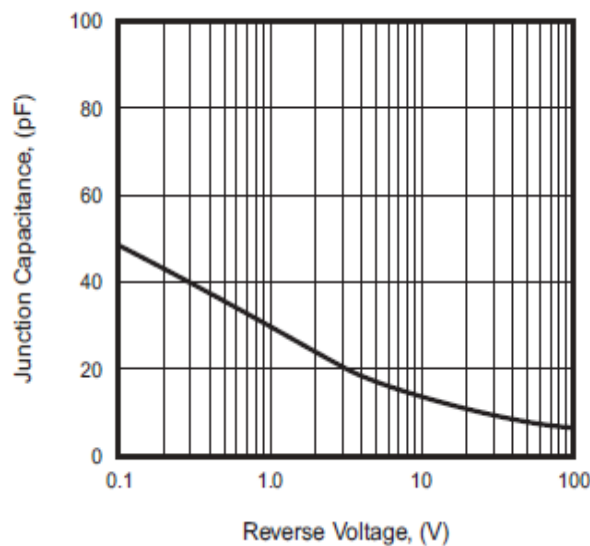


Fig.5 - Typical Junction Capacitance



The curve above is for reference only. 曲线图仅供参考。

S3*-13-99-A001-CC0161

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