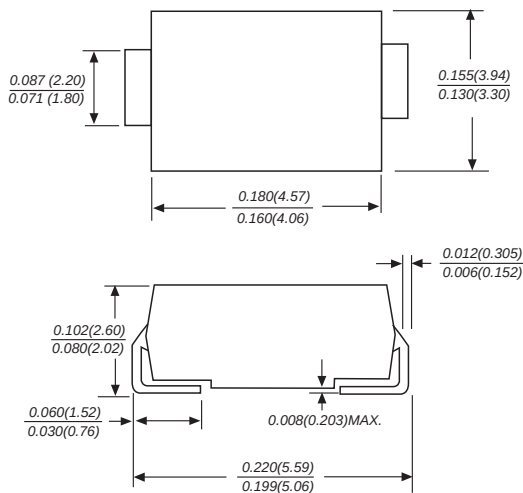


SURFACE MOUNT GENERAL PURPOSE RECTIFIERS

Reverse Voltage - 50 to 1000 Volts Forward Current - 2.0 Ampere

DO-214AA/SMB



Dimensions in inches and (millimeters)

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94-0
- For surface mounted application
- Glass Passivated Chip Junction
- High current capability
- Low forward voltage drop
- High temperature soldering guaranteed: 250°C/10seconds

Mechanical Data

- **Case:** JEDEC DO-214AA/SMB molded plastic bldy
- **Terminals:** Plated leads solderable per MIL-STD-750, Method 2026
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half-wave 60Hz, resistive or inductive load, For capacitive load derate current by 20%.

Type Number	SYMBOL	S2A	S2B	S2D	S2G	S2J	S2K	S2M	Units
Maximum recurrent peak reverse voltage	V _{RM}	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
Maximum average rectified output current at @TL=100℃	I _(AV)	2.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50.0							A
Maximum instantaneous forward voltage at2.0A	V _F	1.15							V
Maximum DC reverse current @TA=25℃	I _R	1.0							uA
At Rated DC blocking voltage @TA=125℃		125.0							
Maximum Reverse Recocery Time((Note 1)	T _{rr}	2.5							us
Typical junction capacitance (Note 2)	C _j	30.0							pF
Typical thermal resistance (Note 3)	RθJA	53.0							℃/W
	RθJL	16.0							
Operating junction and storage temperature range	T _j ,T _{STG}	-55 to +150							℃

Note: 1. Measured with $I_F=0.5A, I_R=1A, I_{rr}=0.25A$

2. Measured at 1.0 MHz and applied reverse Voltage of 4.0V D.C

3. P.C.B. mounted with 0.4×0.4" (10×10mm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES S2A THRU S2M

FIG.1 FORWARD CURRENT DERATING CURVE

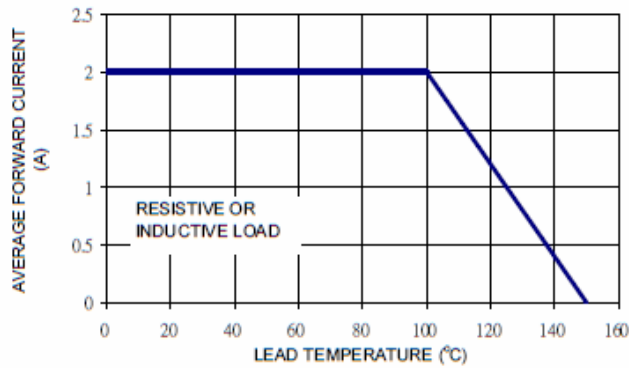


FIG. 2 TYPICAL REVERSE CHARACTERISTICS

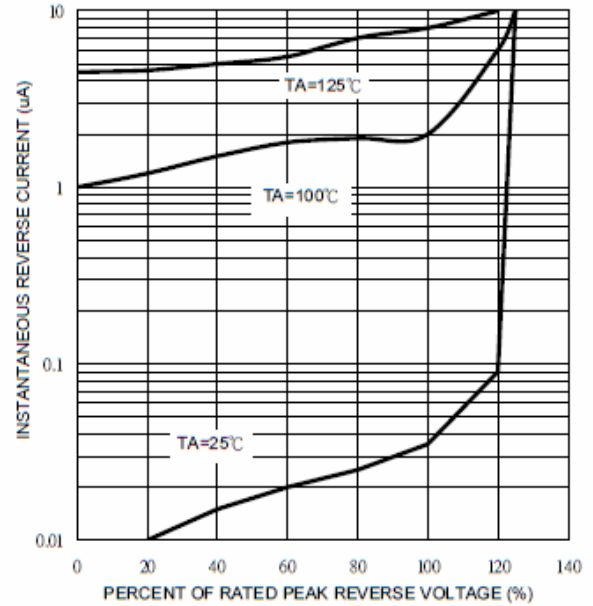


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

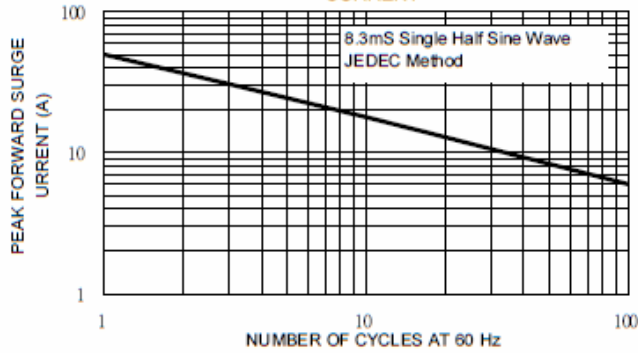


FIG. 4 TYPICAL JUNCTION CAPACITANCE

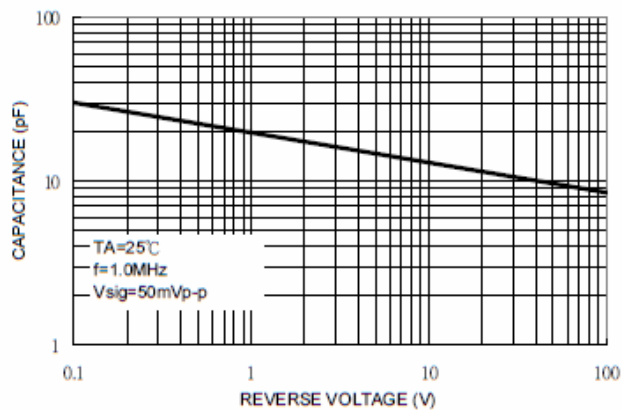


FIG. 5 TYPICAL FORWARD CHARACTERISTICS

