

Surface Mount General Rectifiers

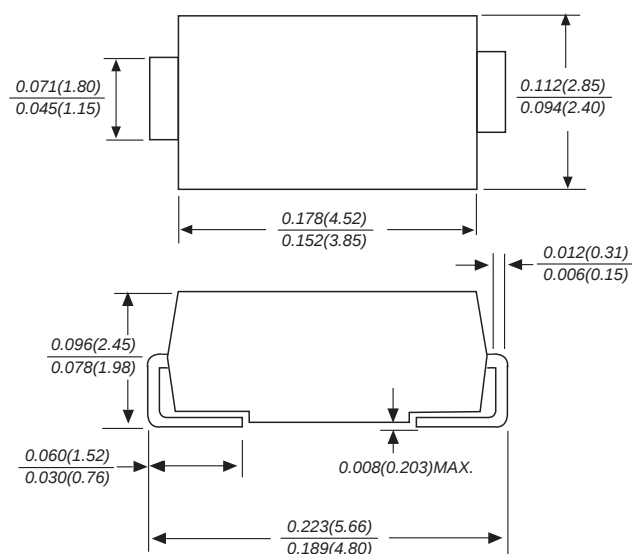
Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:260°C/10seconds at terminals

Mechanical Data

- **Case:** JEDEC SMA(DO-214AC) molded plastic body
- **Terminals:** Plated leads solderable per MIL-STD-750, Method 2026
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any

SMA(DO-214AC)



Dimensions in inches and (millimeters)

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	M1	M2	M3	M4	M5	M6	M7	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°C	I _(AV)	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30.0							A
Maximum instantaneous forward voltage at1.0A	V _F	1.1							V
Maximum DC reverse current @TA=25°C	I _R	5.0							uA
At Rated DC blocking voltage @TA=100°C		50.0							
Typical junction capacitance (Note 1)	C _j	15.0							pF
Typical thermal resistance (Note 2)	RθJA	68.0							°C/W
Operating junction and storage temperature range	T _j , T _{STG}	-55 to +150							°C

Note: 1. Measured at 1.0 MHz and applied reverse Voltage of 4.0V D.C

2. P.C.B.mounted with 0.2×0.2"(5×5mm)copper pad areas.

RATINGS AND CHARACTERISTIC CURVES M1 THRU M7

FIG. 1- FORWARD CURRENT DERATING CURVE

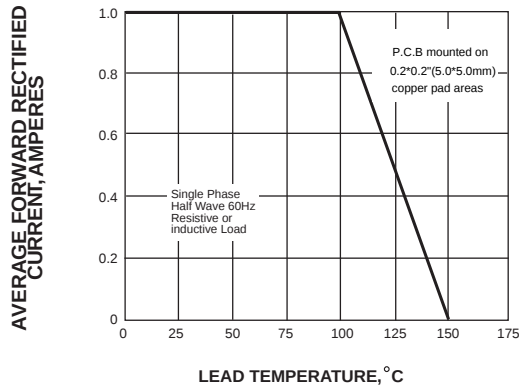


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

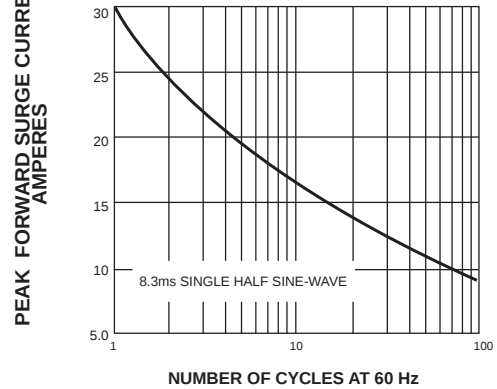


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

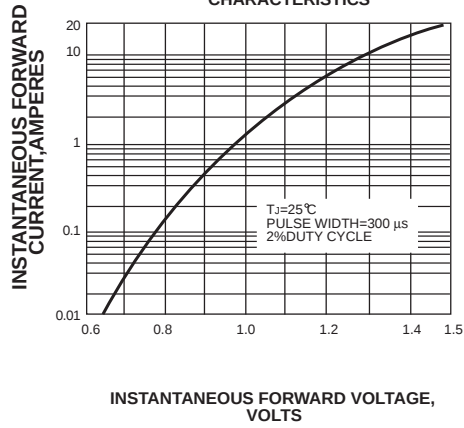


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

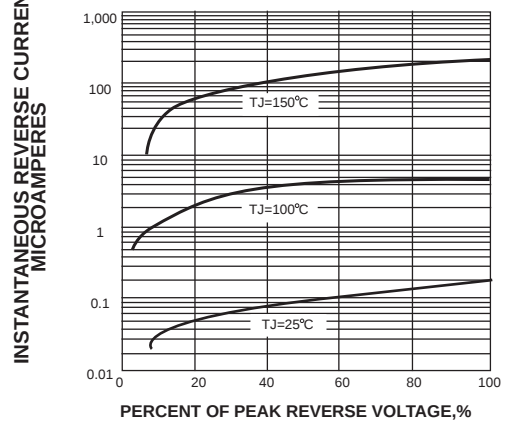


FIG. 5-TYPICAL JUNCTION CAPACITANCE

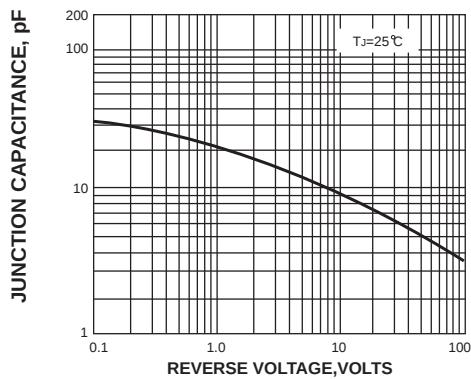


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

