

SMA



Features

- Low reverse leakage
- Glass passivated junction
- High forward surge current capability
- High efficiency operation
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0

Mechanical Data

- CASE: SMAJ(DO-214AC) Molded Plastic
- Polarity: Color band denotes cathode end
- Mounting position: ANY
- Weight: 0.0025 ounces, 0.071 gram

Maximum Ratings & Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.)

Parameter	SYMBOLS	S2MA	UNITS
	MARKING	S2M	
Maximum repetitive peak reverse voltage	V _{RRM}	1000	V
Maximum RMS voltage	V _{RMS}	700	V
Maximum DC blocking voltage	V _{DC}	1000	V
Maximum average forward rectified current at T _L =100 C	I _(AV)	2.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	50.0	A
Maximum instantaneous forward voltage at 2.0A	V _F	1.10	V
Maximum DC reverse current T _A =25 C at rated DC blocking voltage T _A =125 C	I _R	5.0 500	u A
Typical junction capacitance (Note1)	C _J	30.0	pF
Typical thermal resistance	R _{qJA}	80.0	C/W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150	C

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

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SMA	Tape/Reel, 11" reel	5000	EIA-481-1

Ratings and Characteristic Curves

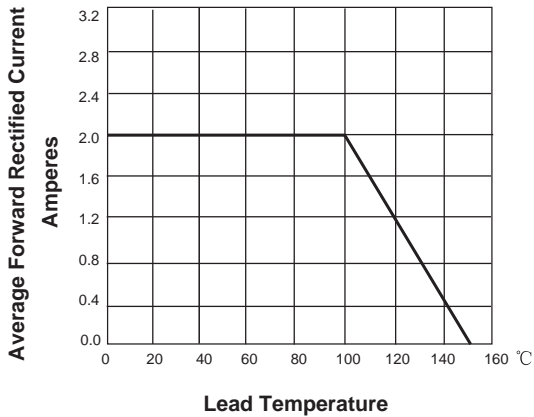


FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

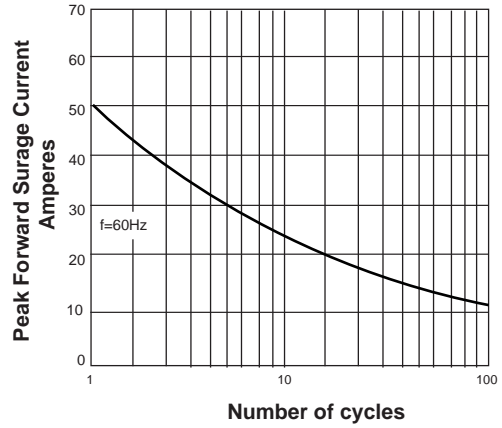


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

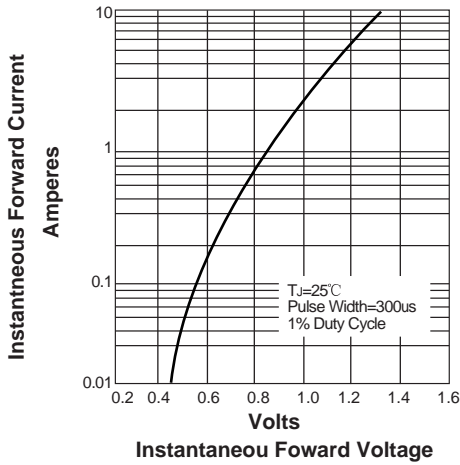


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

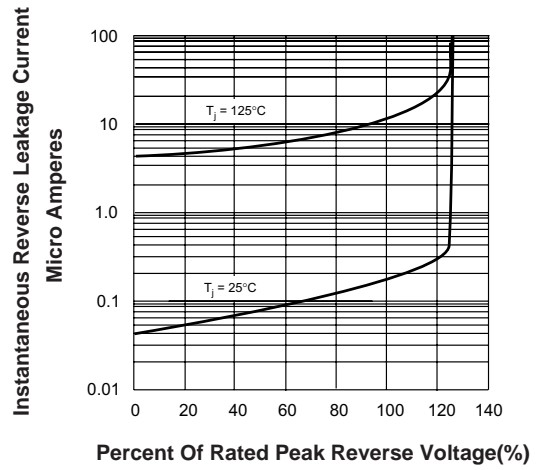


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

Package Outline Dimensions: SMA(DO-214AC)

Dim	Millimeters		Inches	
	Min	Max	Min	Max
L	4.1	4.3	0.161	0.169
D	2.5	2.7	0.098	0.106
D1	1.3	1.5	0.051	0.059
T	4.8	5.2	0.189	0.205
T1	0.9	1.5	0.035	0.060
d	-	0.2	-	0.008
H	2.05	2.35	0.081	0.093
H1	2.0	2.2	0.079	0.087