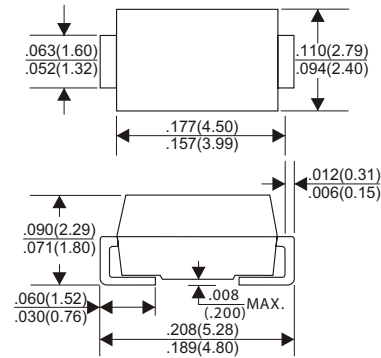




DO-214AC (SMA)



● FEATURES

- Lead free product
- Ideal for surface mount applications
- Easy pick and place
- Built-in strain relief
- Low forward voltage drop

● MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Metallurgically bonded construction
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.063 grams

● MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	SM120A	SM130A	SM140A	SM150A	SM160A	SM180A	SM190A	SM1100A	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	90	100	V
Working Peak Reverse Voltage	20	30	40	50	60	80	90	100	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current, See Fig. 1	1.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	35								A
Maximum Instantaneous Forward Voltage at 1.0A	0.45	0.52		0.65		0.83			V
Maximum DC Reverse Current Ta=25 °C	0.1								mA
At Rated DC Blocking Voltage Ta=100 °C	6								
Typical Junction Capacitance (Note 1)	110								pF
Typical Thermal Resistance RθJA (Note 2)	50								°C / W
Operating Temperature Range T _J	- 50 ~ + 150								°C
Storage Temperature Range T _{STG}	- 60 ~ + 175								°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient.

● RATING AND CHARACTERISTIC CURVES (SM120A THRU SM1100A)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

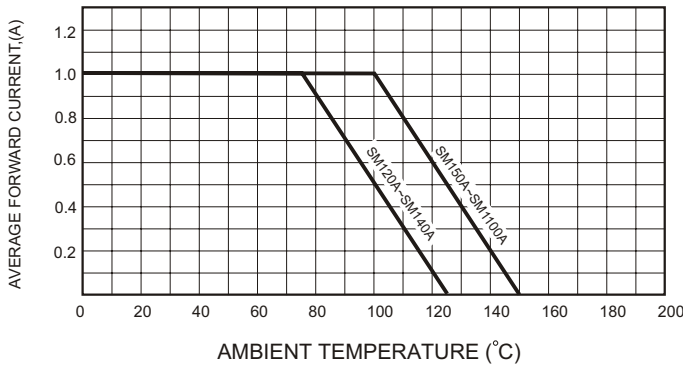


FIG.2-TYPICAL FORWARD CHARACTERISTICS

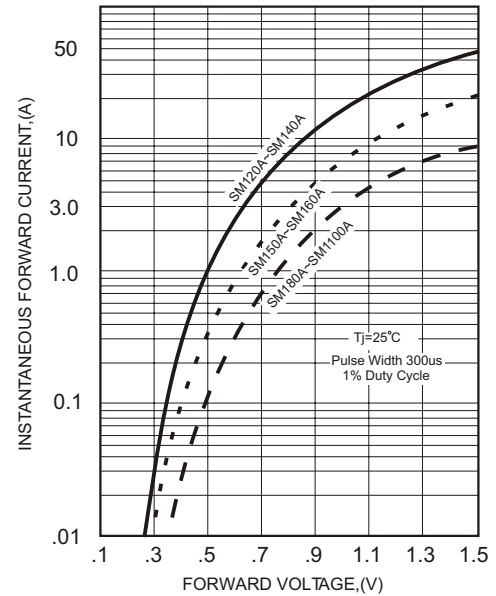


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

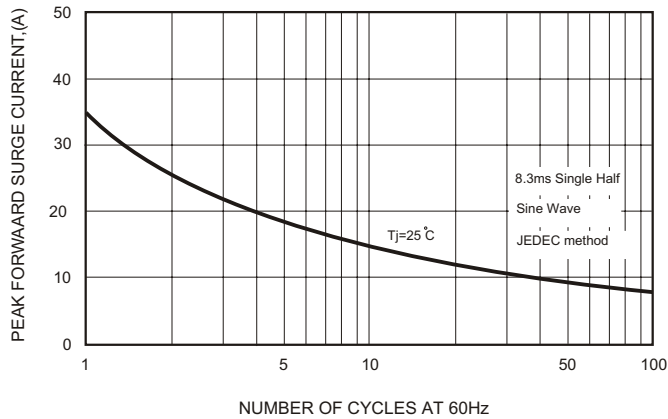


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

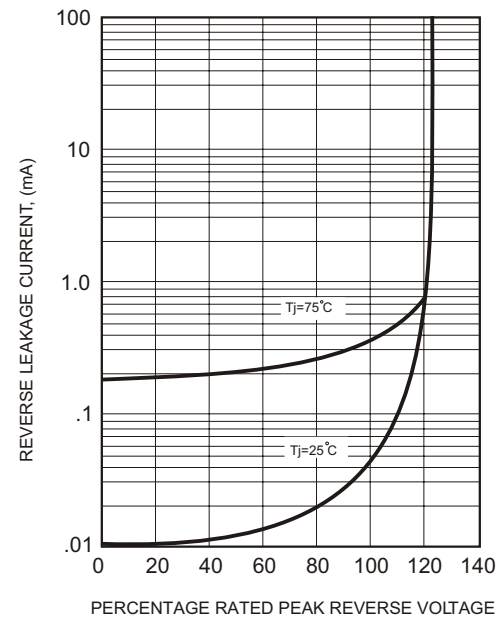


FIG.4-TYPICAL JUNCTION CAPACITANCE

