



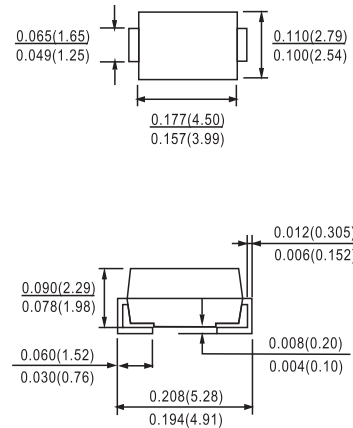
**FEATURES**

- \* 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

DO-214AC(SMA)



Dimensions in inches and (millimeters)

**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	
Maximum RMS Voltage	14	21	28	35	42	56	63	70	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)	40								A	
Maximum Instantaneous Forward Voltage at 1.0A	0.55		0.70		0.85				V	
Maximum DC Reverse Current Ta=25°C	1.0								mA	
at Rated DC Blocking Voltage Ta=100°C	10								mA	
Typical Junction Capacitance (Note1)	110								pF	
Typical Thermal Resistance R JA (Note 2)	50								°C/W	
Operating Temperature Range Tj	-65 — +125			-65 — +150						°C
Storage Temperature Range Tstg	-65 — +150								°C	

NOTES:

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



RATINGS AND CHARACTERISTIC CURVES SM120A THRU SM1100A

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

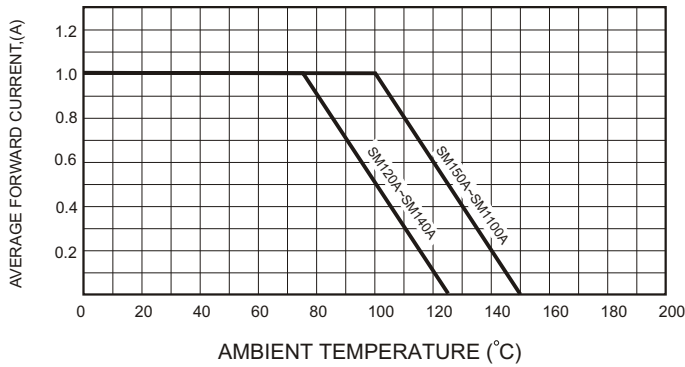


FIG.2-TYPICAL FORWARD CHARACTERISTICS

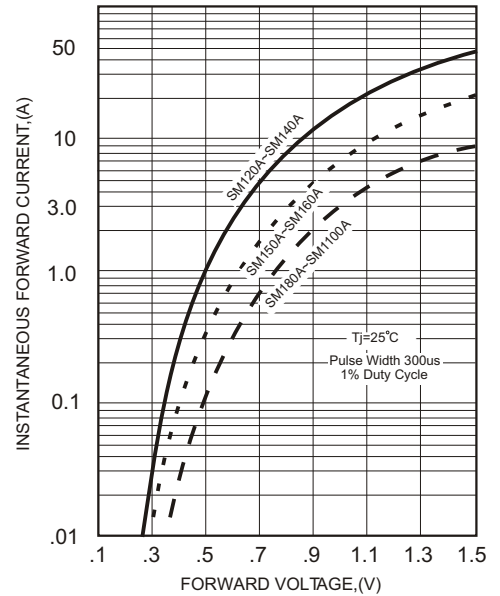


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

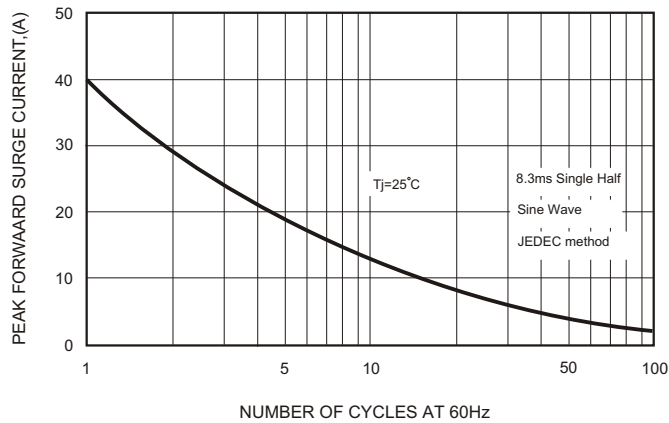


FIG.4-TYPICAL JUNCTION CAPACITANCE

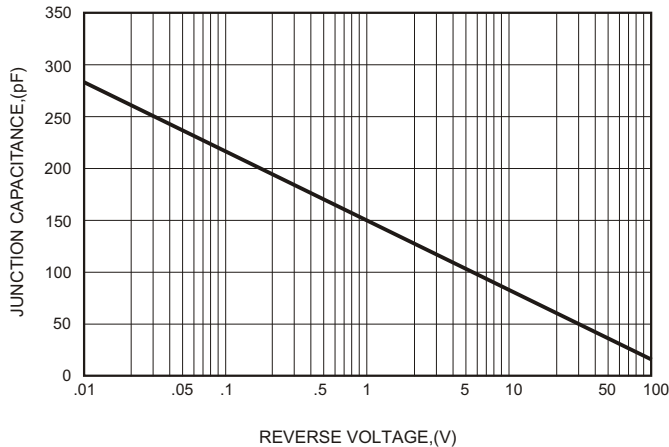


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

