

SM320A THRU SM3100A



3.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS



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

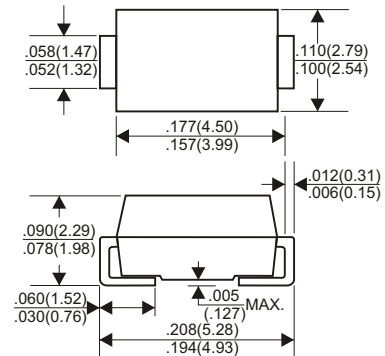
VOLTAGE RANGE

20 to 100 Volts

CURRENT

3.0 Ampere

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	SM320A	SM330A	SM340A	SM350A	SM360A	SM380A	SM390A	SM3100A	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										
At T _L =100°C									3.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)									100	A
Maximum Instantaneous Forward Voltage at 3.0A	0.55				0.75	0.85			V	
Maximum DC Reverse Current					2.0				mA	
at Rated DC Blocking Voltage					20				mA	
Typical Junction Capacitance (Note 1)					300				pF	
Typical Thermal Resistance R _{JL} (Note 2)					10				°C/W	
Operating Temperature Range T _J					-65 — +125				°C	
Storage Temperature Range T _{STG}					-65 — +150				°C	

NOTES:

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

RATING AND CHARACTERISTIC CURVES (SM320A THRU SM3100A)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

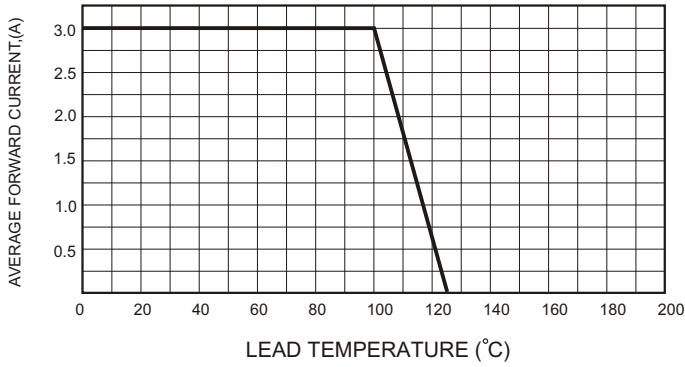


FIG.2-TYPICAL FORWARD CHARACTERISTICS

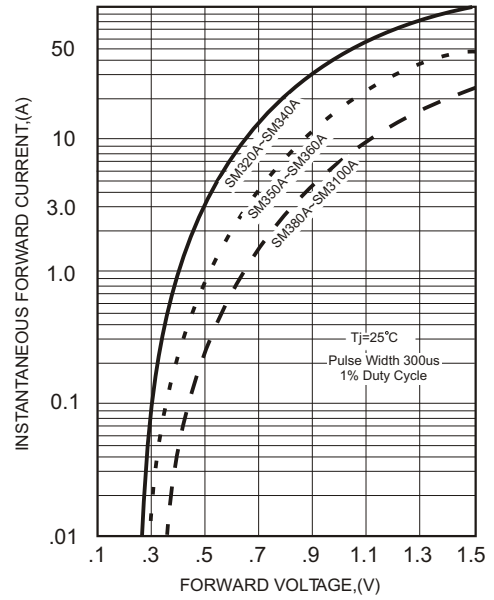


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

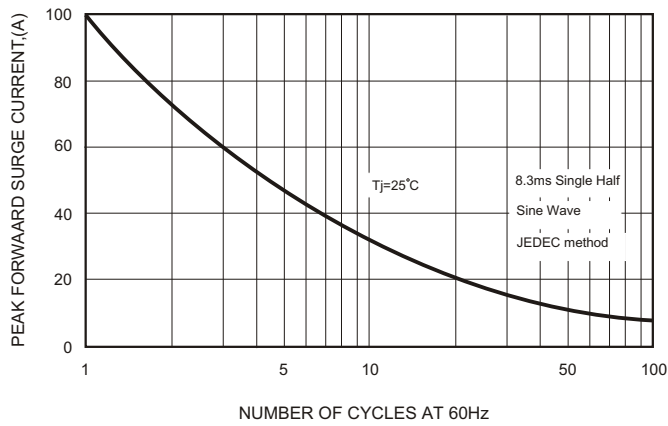


FIG.4-TYPICAL JUNCTION CAPACITANCE

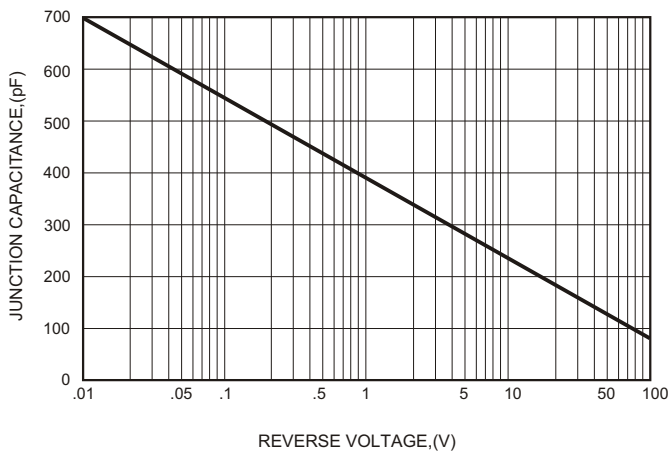


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

