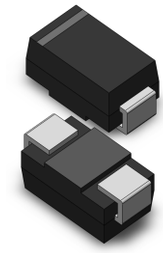
SM320A - SM3100A

SURFACE MOUNT SCHOTTKY BARRIER DIODES

VOLTAGE RANGE: 20 - 100V
CURRENT: 3.0 A



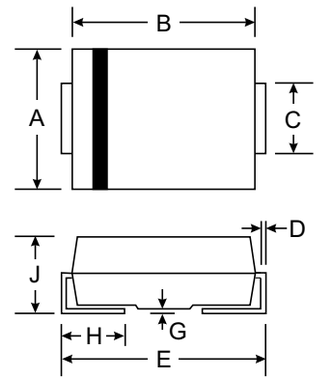
Features

- For Surface Mounted Applications
- High Temperature Metallurgically Bonded Contacts
- Plastic Material - UL Flammability Classification 94V-0
- High Reliability
- High Current Capability and Low VF
- Submersible Temperature of 265°C for 10 Seconds in Solder Bath

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Weight: 0.064 grams (approx.)

RoHS COMPLIANT



SMA(DO-214AC)		
Dim	**Min**	**Max**
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics

T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SM320A	SM330A	SM340A	SM350A	SM360A	SM380A	SM390A	SM3100A	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	50	60	80	90	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	56	64	71	V
Average Rectified Output Current @T_L = 105°C	I_O	3.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100								A
Forward Voltage @I_F = 3.0A	V_{FM}	0.55			0.75		0.85			V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	2.0 20								mA
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$ $R_{\theta JA}$	10 50								°C/W
Operating Temperature Range	T_j	-65 to +125								°C
Storage Temperature Range	T_{STG}	-65 to +150								°C

Note: 1. Mounted on P.C. Board with 8.0mm^2 copper pad area.

RATINGS AND CHARACTERISTIC CURVES SM320A THRU SM3100A

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

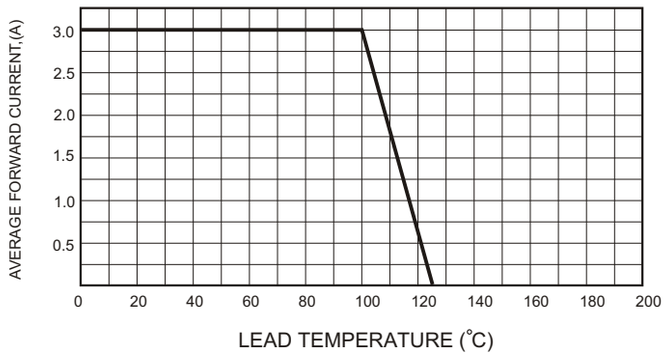


FIG.2-TYPICAL FORWARD CHARACTERISTICS

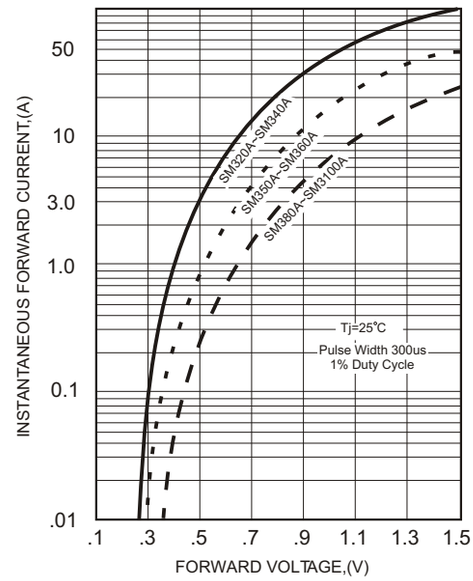


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

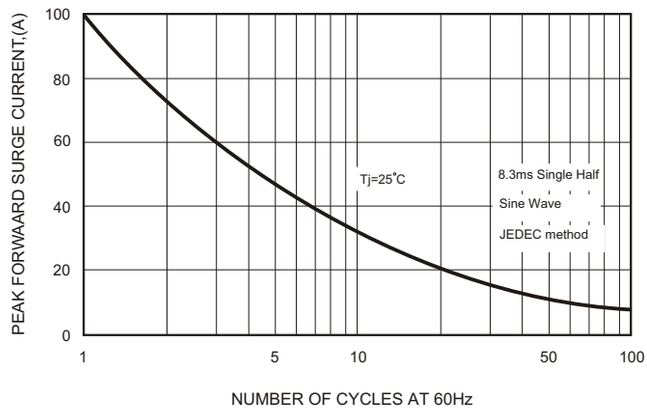


FIG.4-TYPICAL JUNCTION CAPACITANCE

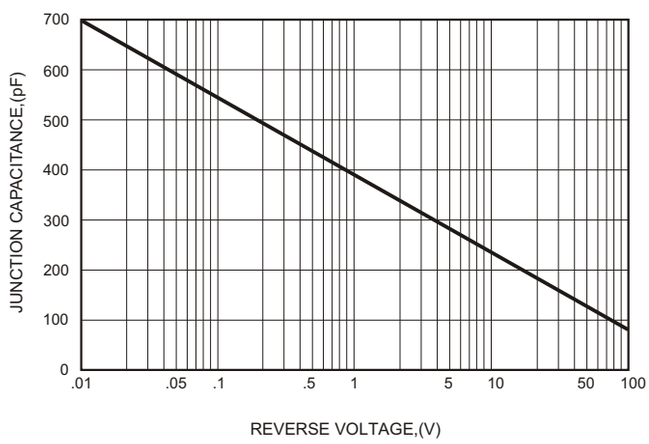


FIG.5 - TYPICAL REVERSE CHARACTERISTICS