

SCHOTTKY DIODES

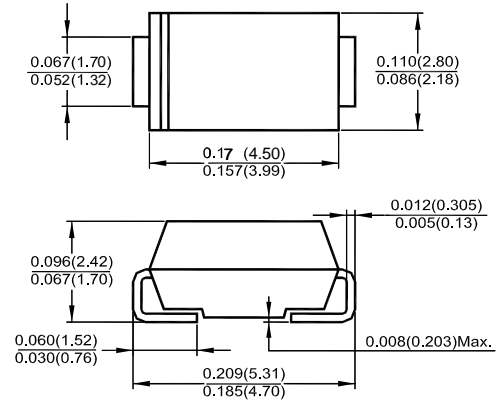
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency.
- High current capability, low forward voltage drop

MECHANICAL DATA

- SMA (DO-214AC) molded plastic body
- leads solderable per MIL-STD-750, Method 2026
- color band denotes cathode end

B340LA



Dimensions in inches and (millimeters)
DO-214AC (SMA)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

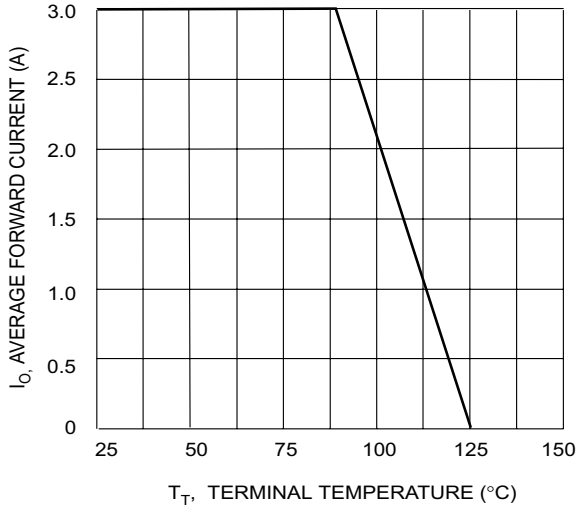
Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	B340LA/B	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current (Note 1) $T_L = 90^\circ\text{C}$	I_O	3.0	A
Non-Repetitive Peak Forward Surge Current, single sine-wave superimposed on rated load, 60Hz	I_{FSM}	70	A
Operating and Storage Temperature Range	T_j, T_{STG}	-40 to +125	°C

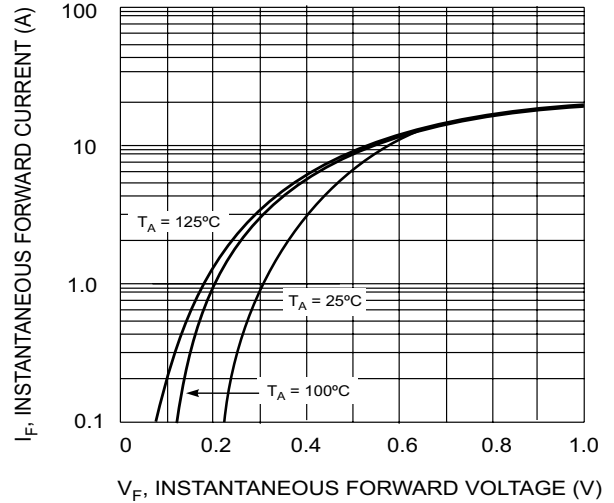
Characteristic	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	40	—	—	—	$I_R = 2.0\text{mA}$
Forward Voltage Drop (Note 2)	V_{FM}	—	0.310	0.350 0.450	V	$I_F = 1.0\text{A}$ $I_F = 3.0\text{A}$
Leakage Current (Note 2)	I_{RM}	—	—	150	uA	$V_R = 15\text{V}$
				1.0	mA	$V_R = 20\text{V}$
				2.0	mA	$V_R = 40\text{V}$
Typical Junction Capacitance	C_j	—	180	—	pF	$f = 1\text{MHz}, V_R = 4.0\text{VDC}$
Typical Thermal Resistance, Junction to Terminal	$R_{\theta JT}$	—	25	—	°C/W	Mounted on alumina substrate

- Notes: 1. When mounted on alumina substrate, 180° half sine wave.
2. Short duration test pulse used to minimize self-heating effect.

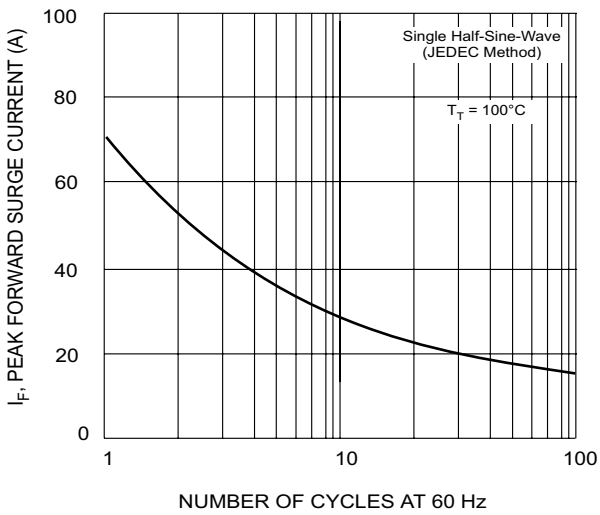
B340LA Typical Characteristics



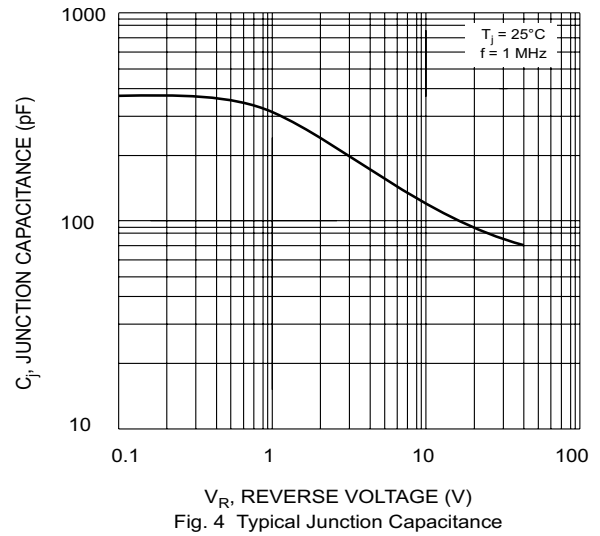
T_T , TERMINAL TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



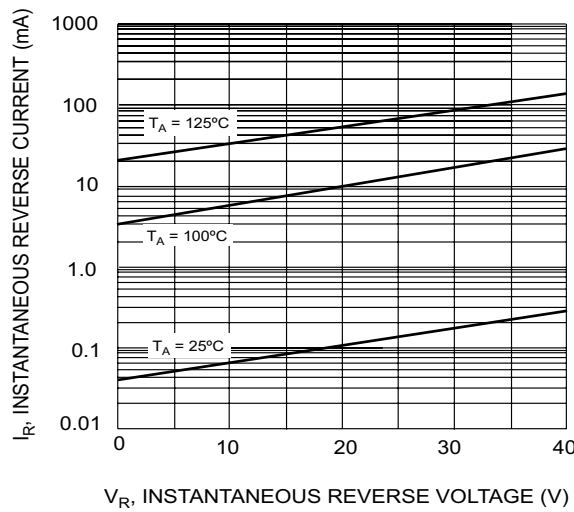
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



V_R , REVERSE VOLTAGE (V)
Fig. 4 Typical Junction Capacitance



V_R , INSTANTANEOUS REVERSE VOLTAGE (V)
Fig. 5 Typical Reverse Characteristics