



B230LA - B240LA

HIGH-CURRENT DENSITY SURFACE MOUNT SCHOTTKY RECTIFIER

VOLTAGE RANGE: 30 - 40V

CURRENT: 2.0 A

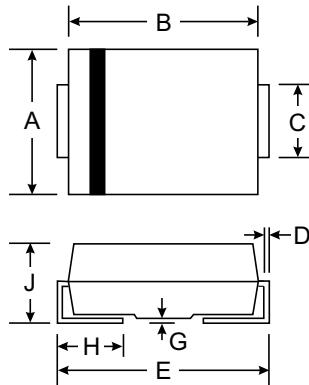
Features

- Low power loss, high efficiency
- Low profile surface mount package
- Built-in strain relief
- Guardring for overvoltage protection
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0



Mechanical Data

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



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	B230LA	B240LA	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	30	40	V
Maximum RMS voltage	V _{RMS}	21	28	V
Maximum DC blocking voltage	V _{DC}	30	40	V
Maximum average forward rectified current at T _L (See Fig. 1)	I _{F(AV)}	2.0		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50		A
Typical thermal resistance ⁽²⁾	R _{θJA} R _{θJL}	110 28		°C/W
Voltage rate of change (rated V _R)	dv/dt	10,000		V/μs
Operating junction temperature range	T _J	-65 to + 150		°C
Storage temperature range	T _{STG}	-65 to + 150		°C
Maximum instantaneous forward voltage at 2.0A ⁽¹⁾	T _J =25°C V _F	0.50	0.55	V
Maximum DC reverse current at rated DC blocking voltage ⁽¹⁾	T _J =25°C I _R	0.5	0.5	mA

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig. 1 – Forward Current Derating Curve

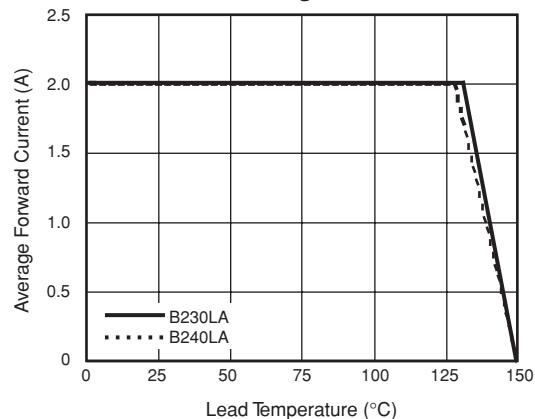


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

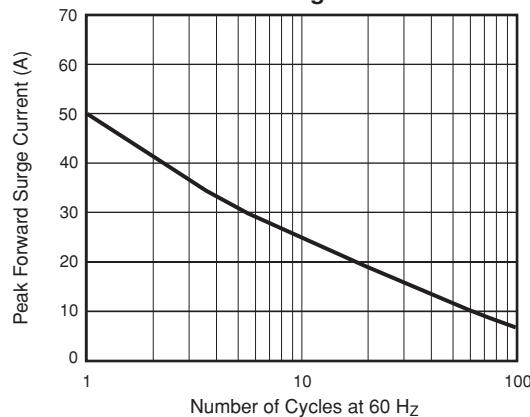


Fig. 3 - Typical Instantaneous Forward Characteristics

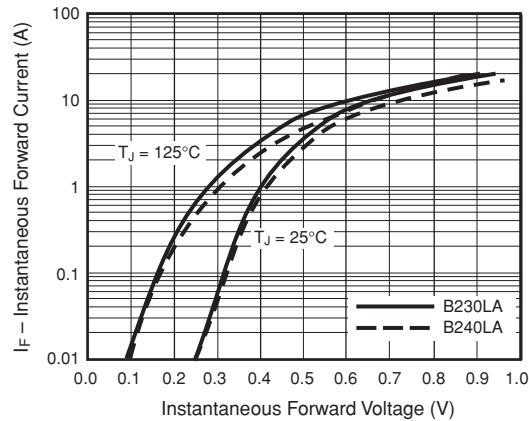


Fig. 4 - Typical Reverse Characteristics

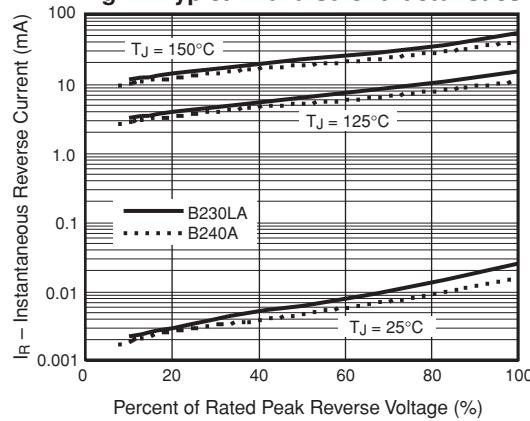


Fig. 5 - Typical Junction Capacitance

