

B220A-B260A

Surface Mount Schottky Barrier Rectifiers

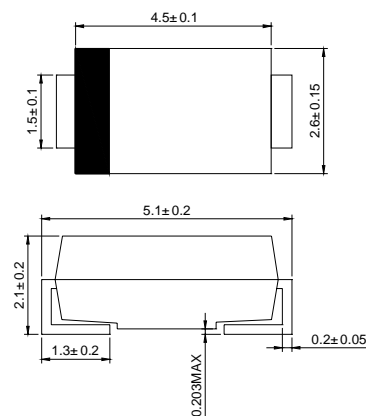
REVERSE VOLTAGE: 20 --- 60 V
CURRENT: 2.0 A



Features

- ◇ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◇ For surface mounted applications
- ◇ Low profile package
- ◇ Built-in strain relief
- ◇ Metal silicon junction, majority carrier conduction
- ◇ High surge capability
- ◇ High current capability, low forward voltage drop
- ◇ Low power loss, high efficiency
- ◇ For use in low voltage high frequency inverters, free wheeling and polarity protection applications
- ◇ Guardring for overvoltage protection
- ◇ High temperature soldering guaranteed: 250°C/10 seconds at terminals

DO - 214AC(SMA)



Dimensions in millimeters

Mechanical Data

- ◇ Case: JEDEC DO-214AC, molded plastic over passivated chip
- ◇ Polarity: Color band denotes cathode end
- ◇ Weight: 0.002 ounces, 0.064 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		B220A	B230A	B240A	B250A	B260A	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS voltage	V_{RWS}	14	21	28	35	42	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	V
Maximum average forward rectified current at T_J (SEE FIG.1)	$I_{(AV)}$	2.0					A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0					A
Maximum instantaneous forward voltage at 2.0A (NOTE.1)	V_F	0.5			0.7		V
Maximum DC reverse current (NOTE1) @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R	0.5 20.0					mA
Typical junction capacitance (NOTE2)	$R_{\theta JL}$	15.0					°C/W
Operating junction and storage temperature range	T_{STG}	-65 --- +150					°C
Storage temperature range	T_J	-65 --- +150			-65 --- +150		°C

NOTE: 1. Pulse test: 300 μs pulse width, 1% duty cycle

2. P.C.B. mounted with 0.2"X0.2" (5.0X5.0mm²) copper pad areas

Ratings AND Characteristic Curves

FIG.1 – FORWARD DERATING CURVE

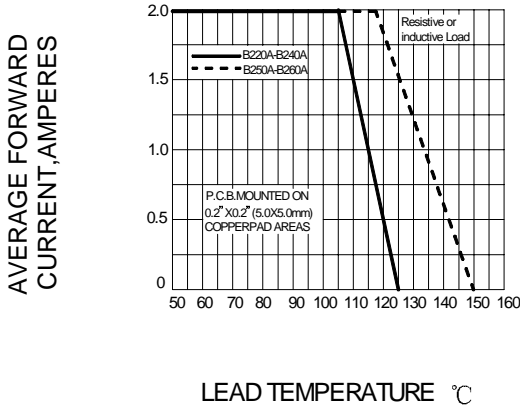


FIG.2- PEAK FORWARD SURGE CURRENT

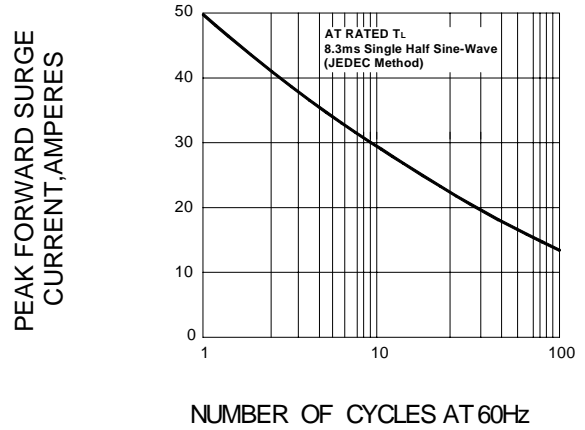


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

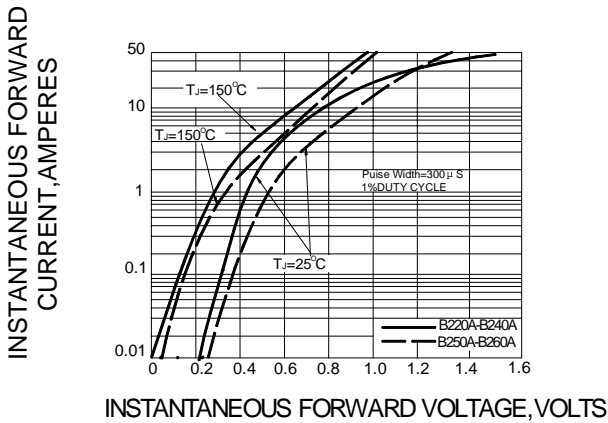


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

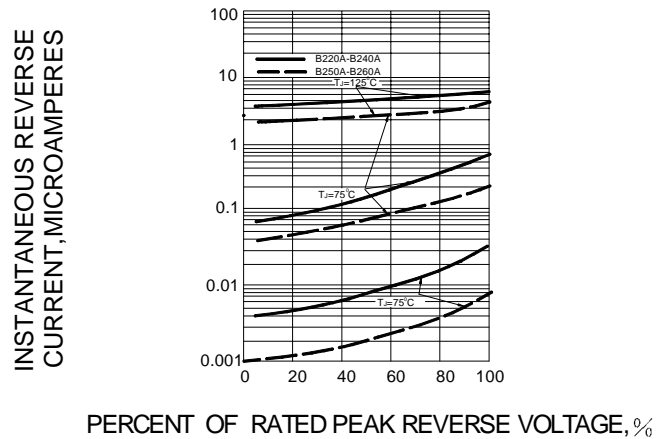


FIG.5-TYPICAL JUNCTION CAPACITANCE

