



B220-B260

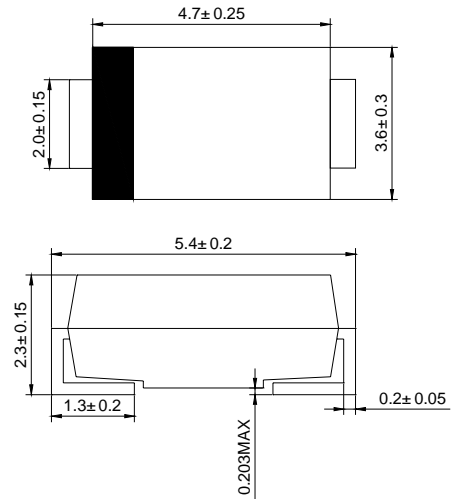
Surface Mount Schottky Barrier Rectifiers

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

DO - 214AA(SMB)

Features

- Plastic package has Underwriters Laborator 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



Dimensions in millimeters

Mechanical Data

Case: JEDEC DO-214AA, molded plastic over passivated chip

Polarity: Color band denotes cathode end

Weight: 0.003 ounces, 0.093 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 C ambient temperature unless otherwise specified

		B220	B230	B240	B250	B260	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_L (SEE FIG.1) (NOTE 2)	$I_{(AV)}$	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 @ $T_A=25^\circ C$ at rated DC blocking voltage (NOTE1) @ $T_A=100^\circ C$	I_R	0.5 20					mA
Typical thermal resistance (NOTE2)	R_{JL}	15.0					$^\circ C/W$
Operating junction and storage temperature range	T_{STG}	-55 --- +150					$^\circ C$
Storage temperature range	T_J	-55 --- +150			-55 --- +150		$^\circ C$

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

2. P.C.B. mounted with 0.55"X0.55" (14.0X14.0mm²) copper pad areas

Ratings AND Characteristic Curves

FIG.1 – FORWARD DERATING CURVE

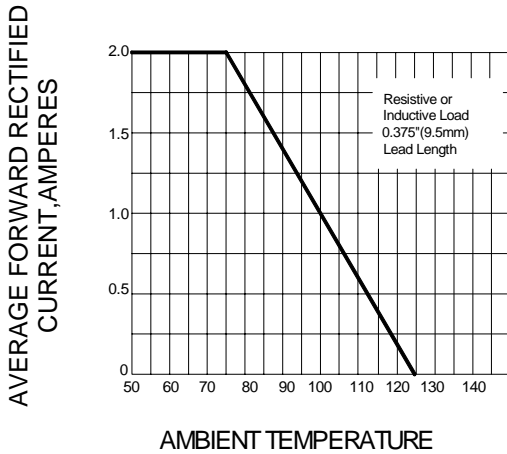


FIG.2- PEAK FORWARD SURGE CURRENT

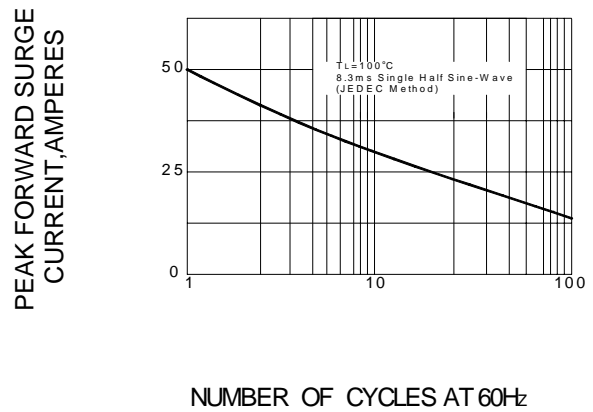


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

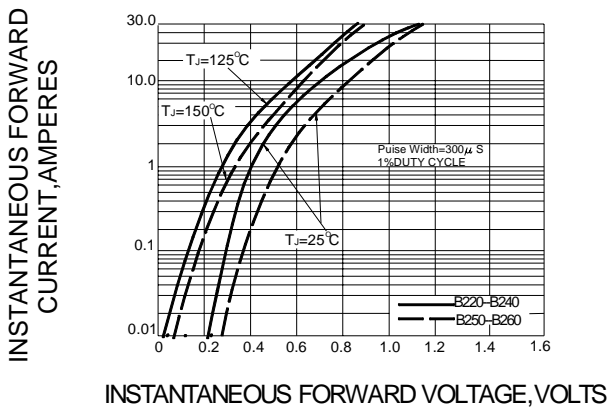


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

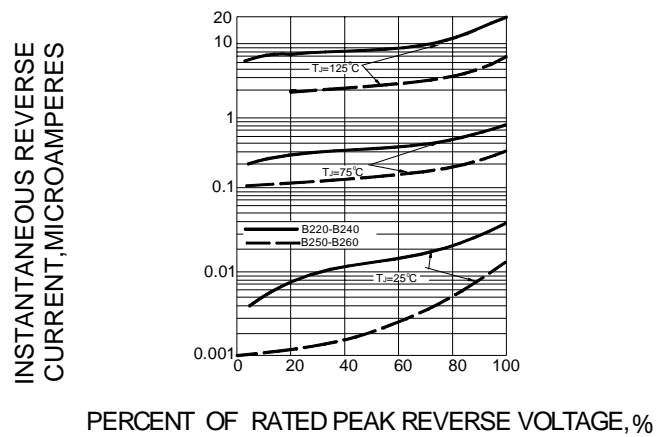


FIG.5-TYPICAL JUNCTION CAPACITANCE

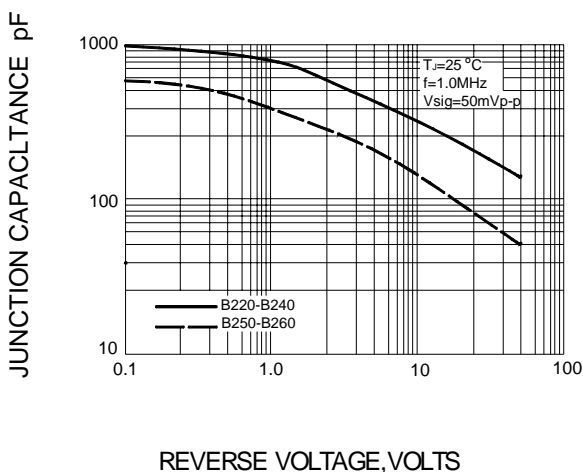


FIG.6- TYPICAL TRANSIENT THERMAL IMPEDANCE

