

## B220A THRU B2100A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

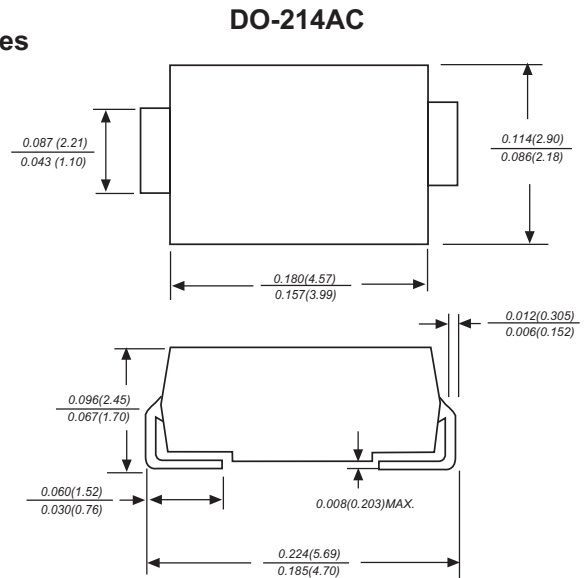
Reverse Voltage - 20 to 100 Volts Forward Current -2.0 Amperes

### FEATURES

The plastic package carries Underwriters Laboratory  
Flammability Classification 94V-0  
For surface mounted applications  
Metal silicon junction, majority carrier conduction  
Low power loss, high efficiency  
Built-in strain relief, ideal for automated placement  
High forward surge current capability  
High temperature soldering guaranteed:  
250°C/10 seconds at terminals

### MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic body  
Terminals : leads solderable per MIL-STD-750,  
Method 2026  
Polarity : Color band denotes cathode end  
Mounting Position : Any



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

	SYMBOLS	B220A	B230A	B240A	B250A	B260A	B280A	B2100A	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	VOLTS
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	VOLTS
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	VOLTS
Maximum average forward rectified current at $T_L$ (see fig.1)	$I_{(AV)}$	2.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50.0							Amps
Maximum instantaneous forward voltage at 2.0A	$V_F$	0.55		0.70		0.85		Volts	
Maximum DC reverse current at rated DC blocking voltage	$I_R$	0.5							mA
$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$		20			10				
Typical junction capacitance (NOTE 1)	$C_J$	220			180			pF	
Typical thermal resistance (NOTE 2)	$R_{JA}$	75.0							$^\circ\text{C}/\text{W}$
Operating junction temperature range	$T_J$	-65 to +125			-65 to +150			$^\circ\text{C}$	
Storage temperature range	$T_{STG}$	-65 to +150							$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas



### RATINGS AND CHARACTERISTIC CURVES B220A THRU B2100A

FIG. 1- FORWARD CURRENT DERATING CURVE

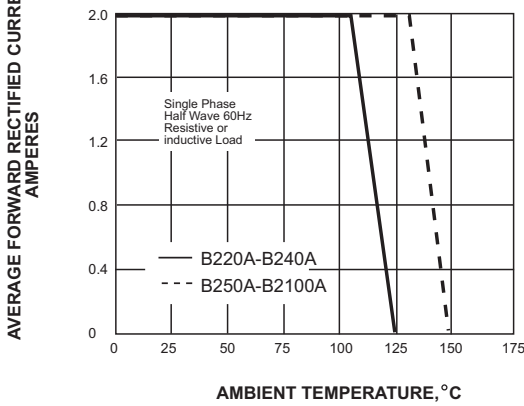


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

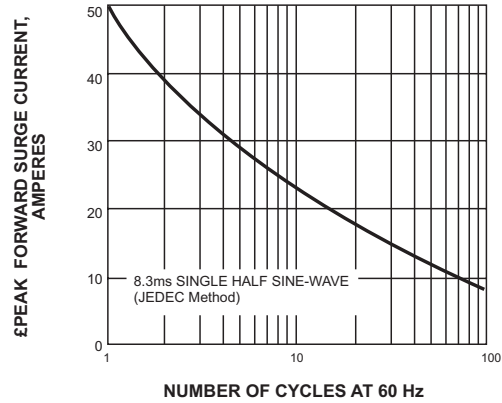


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

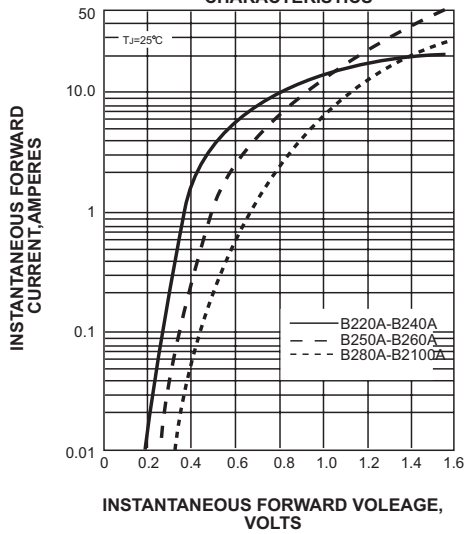


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

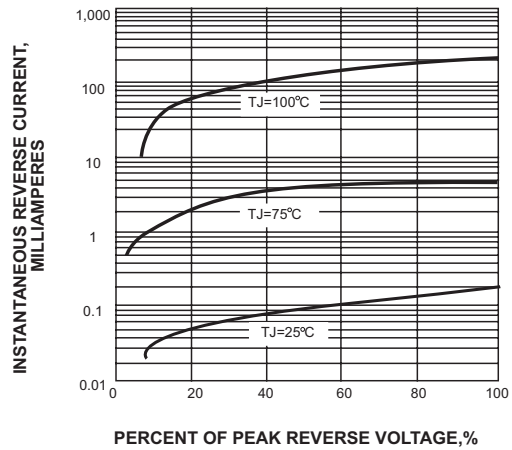


FIG. 5-TYPICAL JUNCTION CAPACITANCE

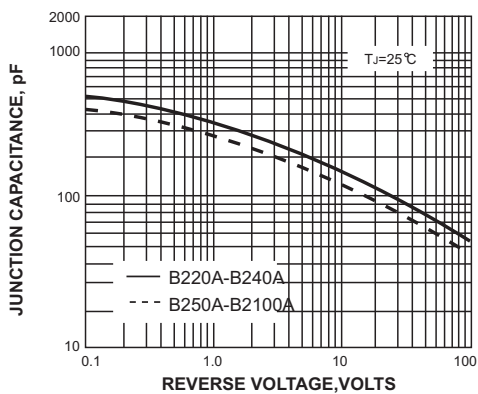


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

