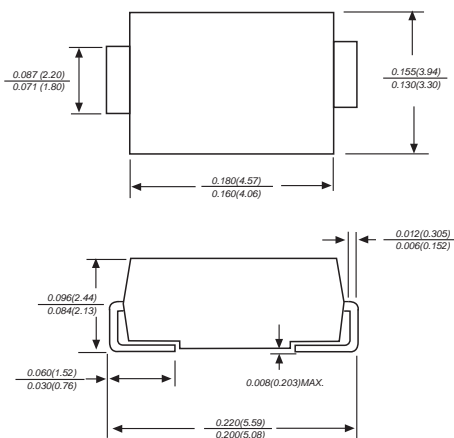


SK515B THRU SK520B

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 150 to 200 Volts Forward Current - 5.0 Amperes

DO-214AA



Dimensions in inches and (millimeters)

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: 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body
Terminals: leads solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.003 ounce, 0.093 grams

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%.

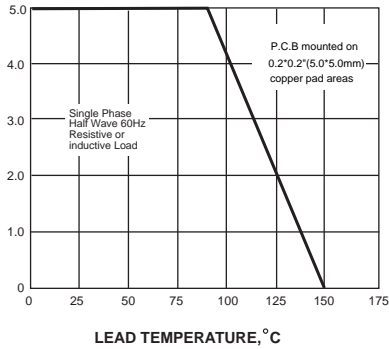
	SYMBOLS	SK515B	SK520B	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	150	200	V
Maximum RMS voltage	V_{RMS}	105	140	V
Maximum DC blocking voltage	V_{DC}	150	200	V
Maximum average forward rectified current at T_L (see fig. 1)	$I_{(AV)}$	5.0		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100		A
Maximum instantaneous forward voltage at 5.0A	V_F	0.85	0.95	V
Maximum DC reverse current at rated DC blocking voltage	I_R	0.1 2.0		mA
Typical junction capacitance (NOTE 1)	C_J	200		
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	68.0		°C/W
Operating junction temperature range	T_J	-55 to +150		°C
Storage temperature range	T_{STG}	-55 to +150		°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. Thermal resistance from junction to ambient.

RATINGS AND CHARACTERISTIC CURVES SK515B THRU SK520B

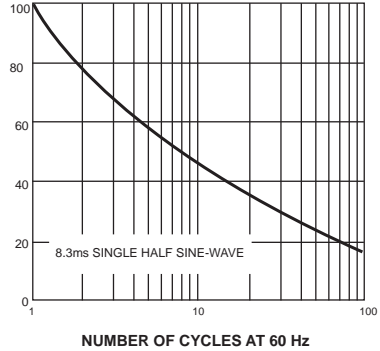
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



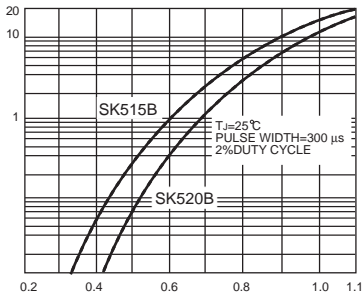
PEAK FORWARD SURGE CURRENT, AMPERES

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



INSTANTANEOUS FORWARD CURRENT, AMPERES

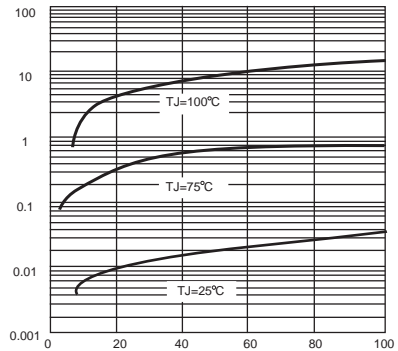
FIG. 3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

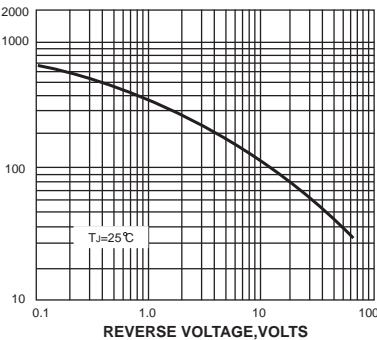
FIG. 4- TYPICAL REVERSE CHARACTERISTICS



PERCENT OF PEAK REVERSE VOLTAGE, %

JUNCTION CAPACITANCE, pF

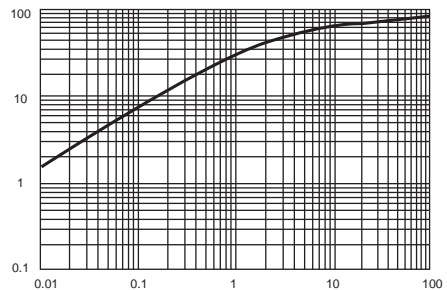
FIG. 5- TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE, VOLTS

TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6- TYPICAL TRANSIENT THERMAL IMPEDANCE



t, PULSE DURATION, sec.