

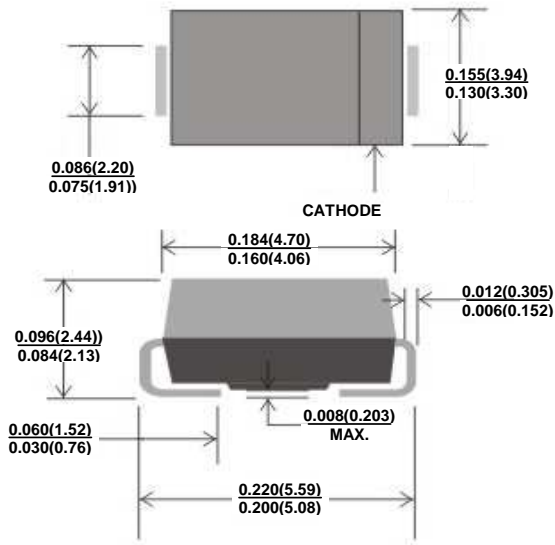


SK22 THRU SK2200

SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 2.0 Ampere

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: 250 °C/10 seconds

MECHANICAL DATA

Case: JEDEC DO-214AA/SMB molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.005 ounce, 0.138 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%.

PARAMETER	SYMBOLS	SK22	SK23	SK24	SK25	SK26	SK28	SK 2100	SK 2150	SK 2200	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC blocking voltage	V_R	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current 0.375"(9.5mm) lead length(see fig.1)	$I_{F(AV)}$	2.0									Amp
Peak forward surge current at 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0									Amps
Maximum Forward Voltage at $I_F=2.0A$	V_F	0.50			0.70		0.85		0.92		Volts
Maximum DC reverse current at rated DC blocking voltage	I_R	0.5									mA
		10.0					5.0				
Typical Junction Capacitance (NOTE 1)	C_J	220			180			160			pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	75									°C/W
Operating Junction Temperature Range	T_J	-65 to +125					-65 to +150				°C
Storage Temperature Range	T_{STG}	-65 to +150									°C

- Note:**
1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. Mounted with minimum recommended padsize, PCBBoard FR4.
 3. $T_J=25^\circ\text{C}$ unless otherwise specified.



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RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

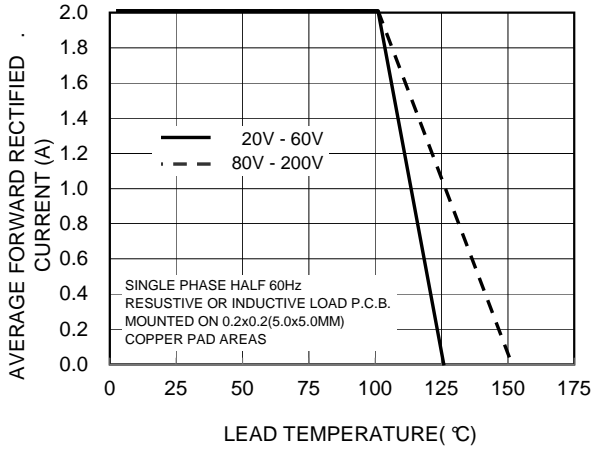


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

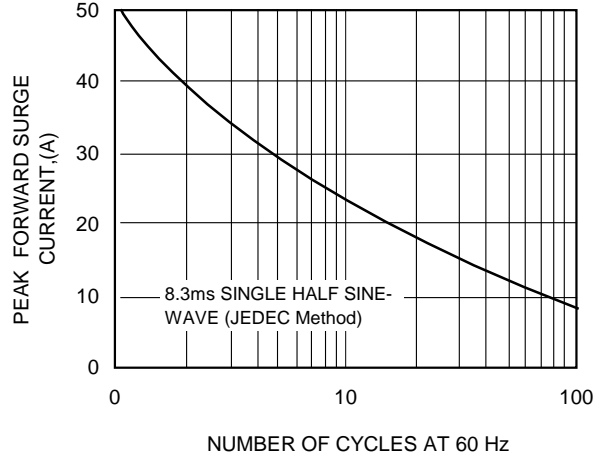


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

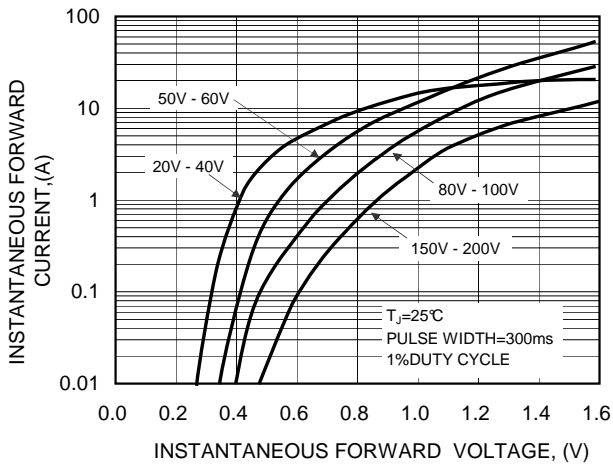


FIG. 4-TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

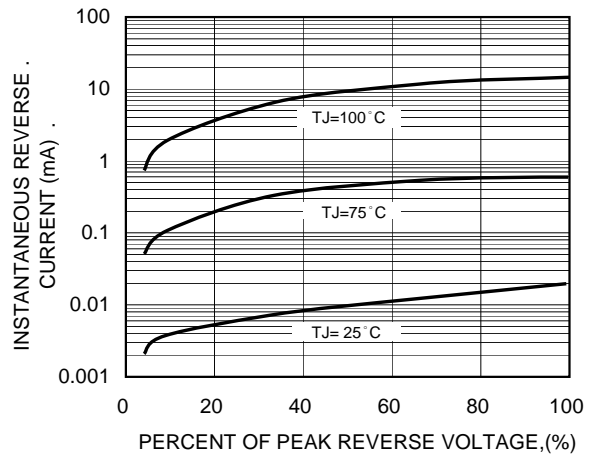


FIG. 5-TYPICAL JUNCTION CAPACITANCE

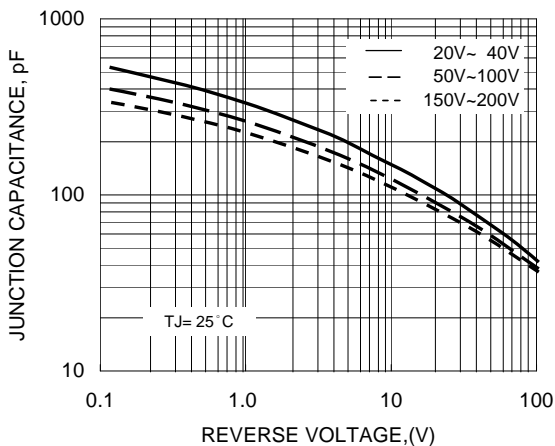


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

