

SK27 THRU SK2B

VOLTAGE 70V ~ 100V

2.0AMP Surface Mount Low V_F Schottky Barrier Rectifiers

FEATURES

- * For surface mount applications
- * Epitaxial construction
- * Very low forward voltage drop
- * For use in low voltage, high frequency inverter, free wheeling

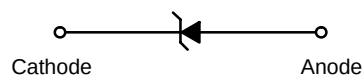
DO- 214AA

SMB



MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V- 0 rate flame retardant
- * Polarity: Color band denotes cathode end
- * Weight: 0.093 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Parameter	Symbols	SK27	SK28	SK29	SK2B	Units
Maximum repetitive peak reverse voltage	V_{RRM}	70	80	90	100	Volts
Maximum RMS voltage	V_{RMS}	49	56	63	70	Volts
Maximum DC blocking voltage	V_{DC}	70	80	90	100	Volts
Maximum average forward rectified current @ $T_L = 100^\circ\text{C}$	$I_{(AV)}$	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 forward voltage at 2.0A DC @ $T_J = 25^\circ\text{C}$ @ $T_J = 100^\circ\text{C}$	V_F	0.79 0.69				Volts
Maximum DC reverse current at rated DC blocking voltage @ $T_J = 25^\circ\text{C}$ @ $T_J = 100^\circ\text{C}$	I_R	0.5 15				mA
Typical junction capacitance (Note 1)	C_J	75				pF
Typical thermal resistance (Note 2)	$R_{\theta JL}$	15				$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to +125				$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150				$^\circ\text{C}$

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal Resistance Junction to Lead.

RATINGS AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

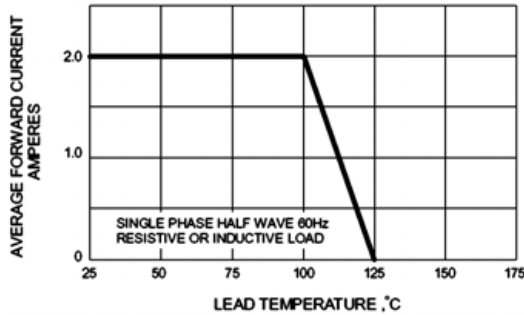


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

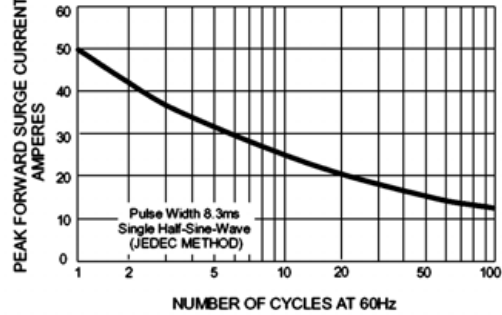


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

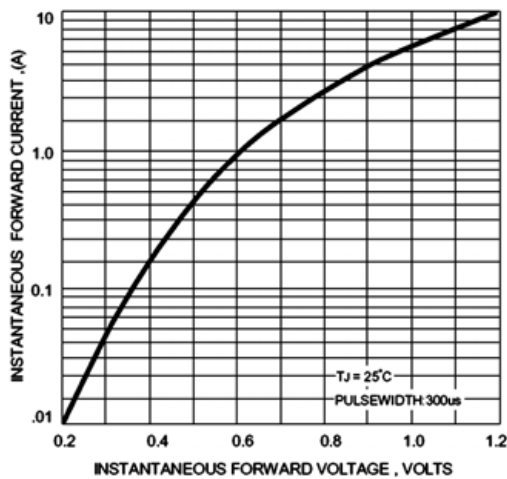


FIG.4 - TYPICAL JUNCTION CAPACITANCE

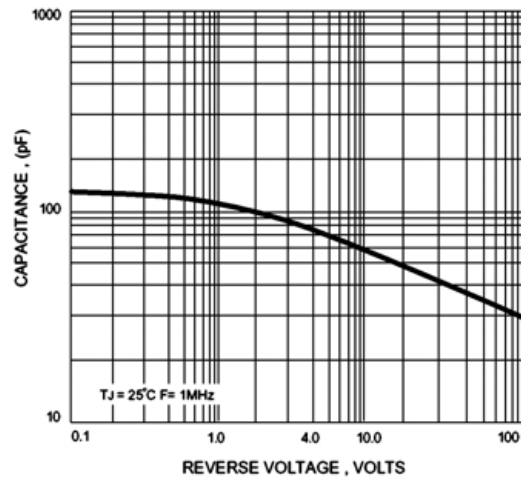
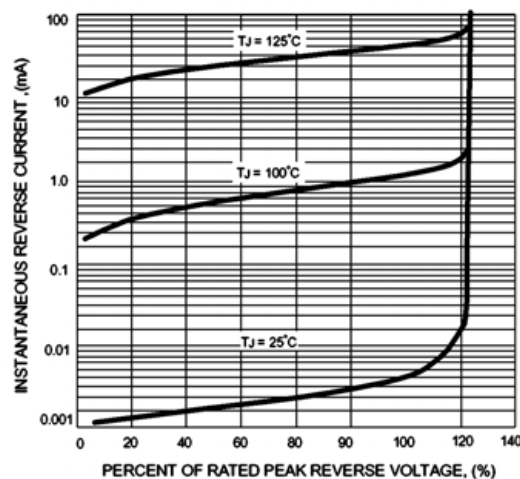


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Package Dimensions in inches and (millimeters)

