

SK12 THRU SK16

VOLTAGE 20V ~ 60V

1.0AMP Surface Mount 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

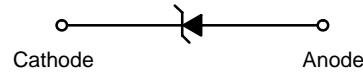
DO- 214AC

SMA



MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V- 0 rate flame retardant
- * Polarity: Color band denotes cathode end
- * Weight: 0.064 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	SK12	SK13	SK14	SK15	SK16	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	Volts
Maximum average forward rect fied current @ $T_L=100^\circ\text{C}$	$I_{(AV)}$	1.0					Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0					Amps
Maximum forward voltage at 1.0A DC	V_F	0.50		0.70			Volts
Maximum DC reverse current at rated DC blocking voltage	I_R			0.5 10.0			mA
Typical junction capacitance (Note 1)	C_J	110					pF
Typical thermal resistance (Note 2)	$R_{\theta JL}$	20					°C/W
Operating junction temperature range	T_J	-55 to +125					°C
Storage temperature range	T_{STG}	-55 to +150					°C

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

RATING AND CHARACTERISTIC CURVES (SK12 THRU SK16)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

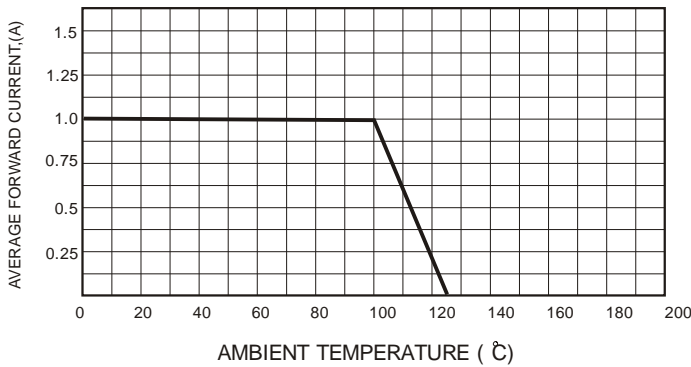


FIG.2-TYPICAL FORWARD CHARACTERISTICS

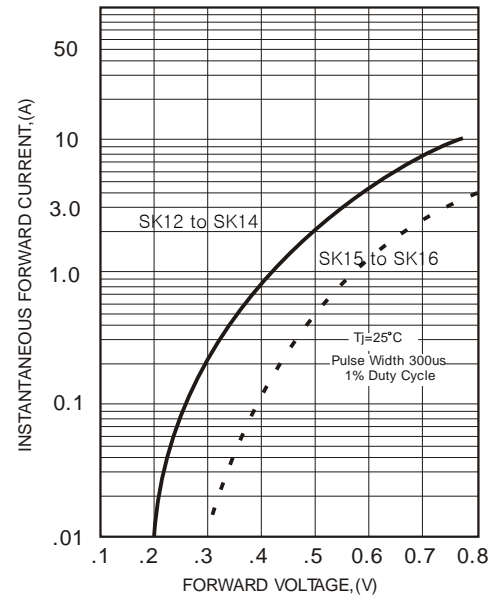


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

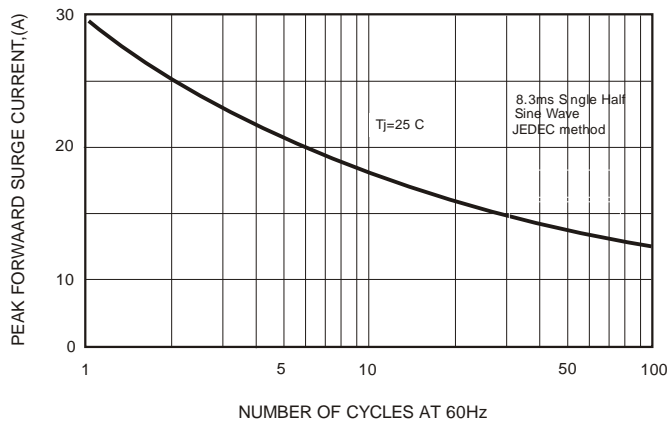


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

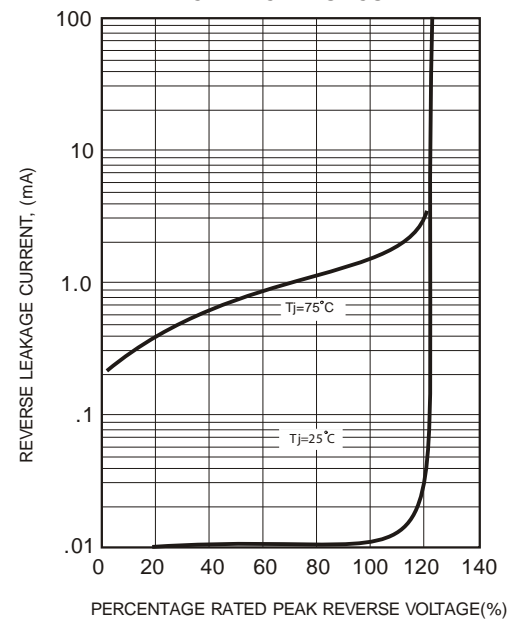
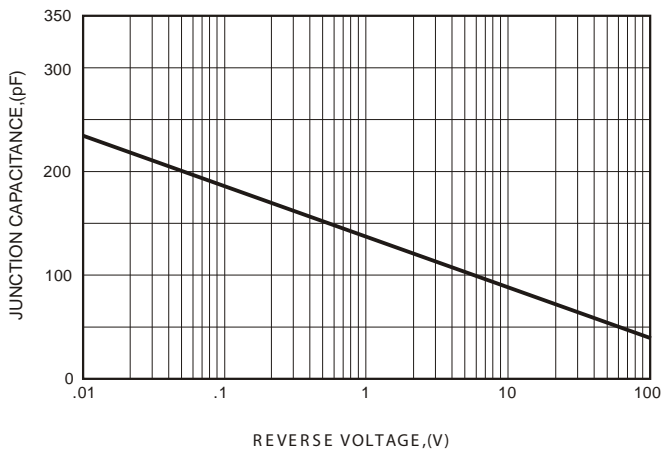


FIG.4-TYPICAL JUNCTION CAPACITANCE



Package Dimensions in inches and (millimeters)

