II. Schottky Rectifier

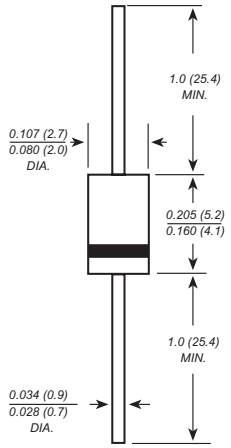
2.0A Schottky Rectifier
SK220~SK2200 (Package: DO-41)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- High temperature soldering guaranteed

MECHANICAL DATA

- Case : JEDEC DO-41 molded plastic body
- Terminals : Plated axial leads, solderable per MIL-STD-202E, Method 208C guaranteed
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.33 grams, 0.012 ounce



Case: DO-41
Dimensions in inches and (millimeters)

Ratings & Electrical Characteristics

Characteristic	Symbol	SK 220	SK 230	SK 240	SK 250	SK 260	SK 280	SK 2100	SK 2150	SK 2200	Units
Maximum recurrent 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_{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward rectified current at derating lead temperature	I_O	2.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60									Amps
Maximum instantaneous forward voltage at 2.0A DC	V_F	0.55			0.70		0.85				Volts
Maximum average reverse current Ta = 25°C	I_R	0.2									mA
at rated DC blocking voltage Ta = 100°C		2									
Typical thermal resistance (Note 1)	Rth-JA	45									°C/W
	Rth-JL	15									
Typical junction capacitance (Note 2)	Cj	180									PF
Operating junction temperature range	Tj	150									°C
Storage temperature range	Tstg	-55 to +150									°C

Notes:
1. Thermal resistance : At 9.5mm lead lengths, PCB mounted.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

Ratings and Characteristic Curves of SK220~SK2200

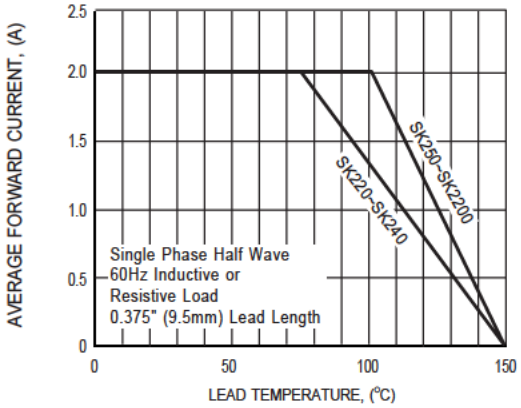


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

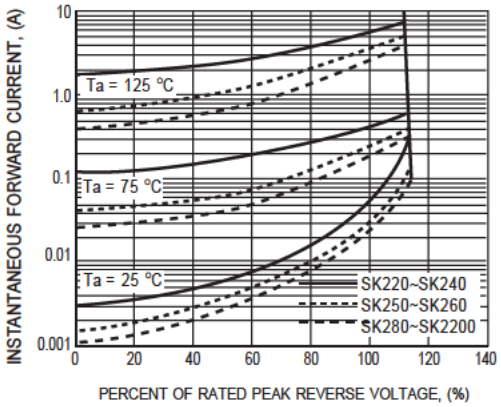


FIG.2 TYPICAL REVERSE CHARACTERISTICS

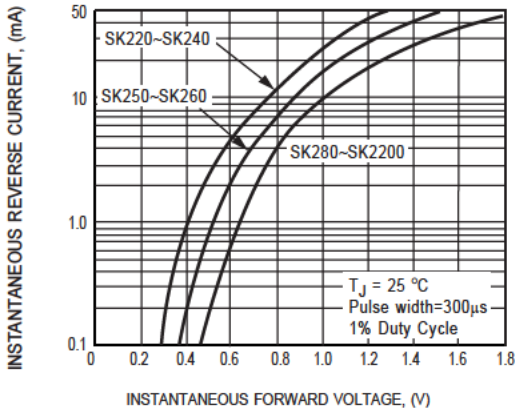


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

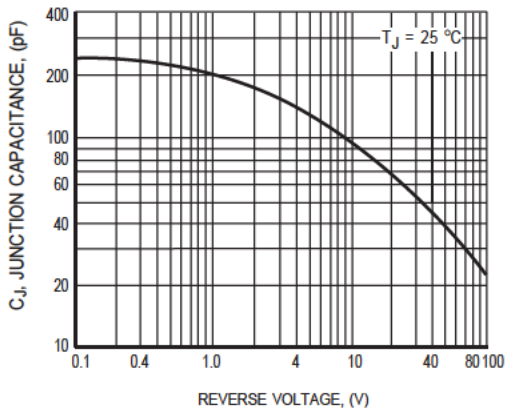


FIG.4 TYPICAL JUNCTION CAPACITANCE

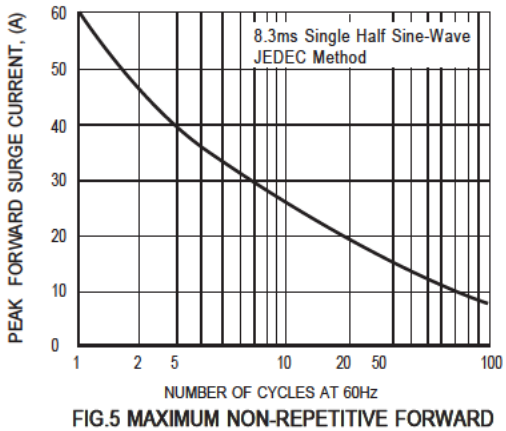


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT