

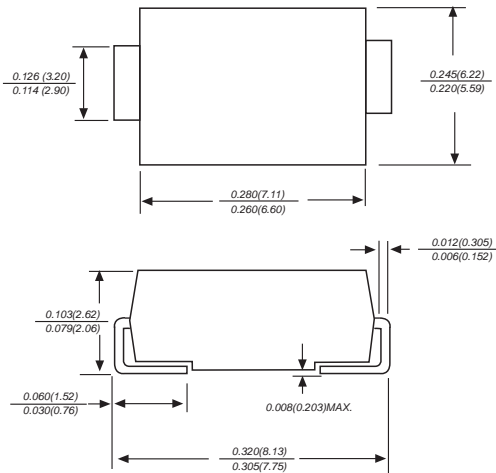


SK82 THRU SK810

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 8.0 Amperes

DO-214AB/SMC



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AB molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.007 ounce, 0.25grams

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%.

MDD Catalog Number	SYMBOLS	SK82	SK83	SK835	SK84	SK845	SK86	SK88	SK810	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	35	40	45	60	80	100	VOLTS
Maximum RMS voltage	V_{RMS}	14	21	24.5	28	31.5	42	56	70	VOLTS
Maximum DC blocking voltage	V_{DC}	20	30	35	40	45	60	80	100	VOLTS
Maximum average forward rectified current at $T_L = 95^\circ C$	$I_{(AV)}$	8.0								Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	200.0								Amps
Maximum instantaneous forward voltage at 8.0A	V_F	0.65						0.85		Volts
Maximum DC reverse current $T_A = 25^\circ C$ at rated DC blocking voltage $T_A = 100^\circ C$	I_R	1						20		mA
Typical junction capacitance (NOTE 1)	C_J	400								pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	18.0								$^\circ C/W$
Operating junction temperature range	T_J	-50 to +150								$^\circ C$
Storage temperature range	T_{STG}	-50 to +150								$^\circ C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

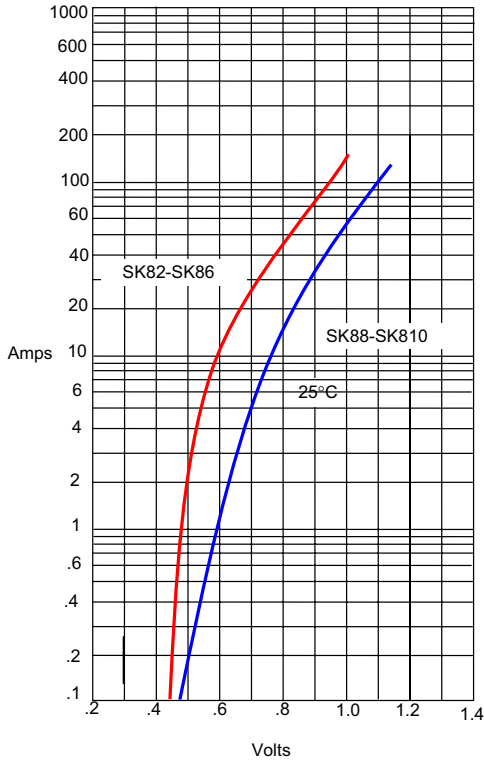
2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas



www.microdiode.com

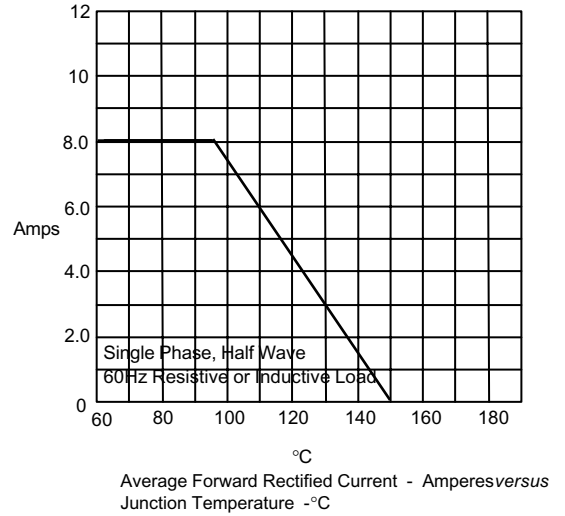
RATINGS AND CHARACTERISTIC CURVES SK82 THRU SK810

Figure 1
Typical Forward Characteristics



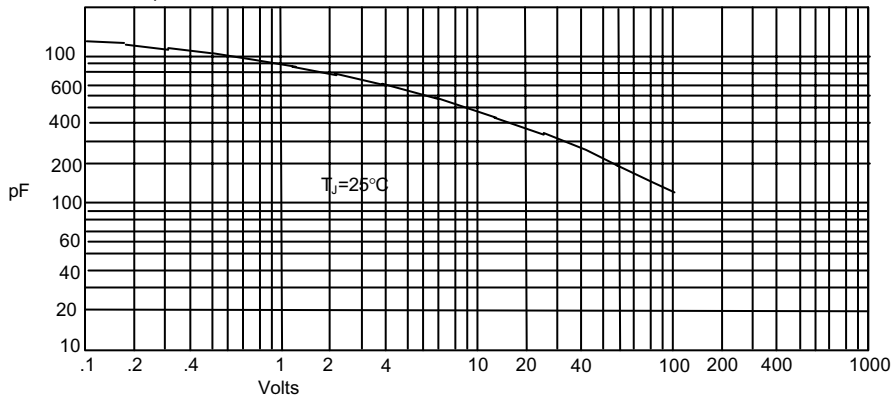
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes versus
Junction Temperature - °C

Figure 3
Junction Capacitance



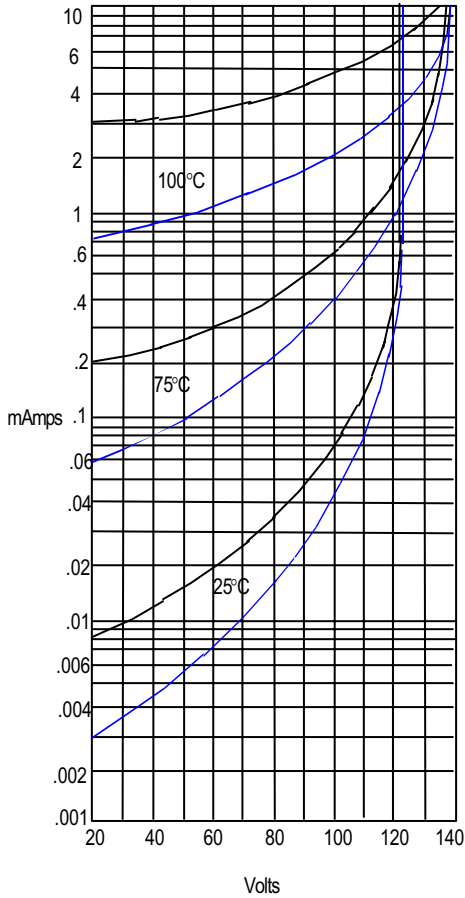
Junction Capacitance - pF versus
Reverse Voltage - Volts

The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!



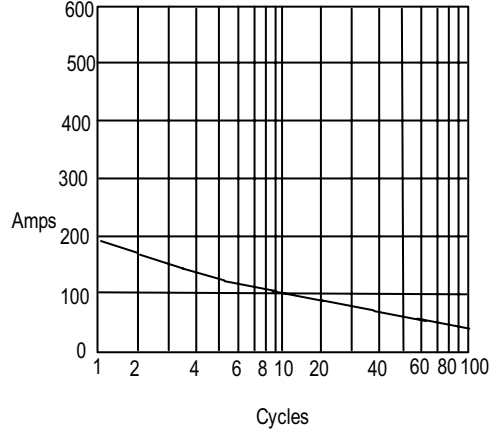
RATINGS AND CHARACTERISTIC CURVES SK82 THRU SK810

Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles

SK82 - 845 ———
SK85 - 810 ———

The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

