

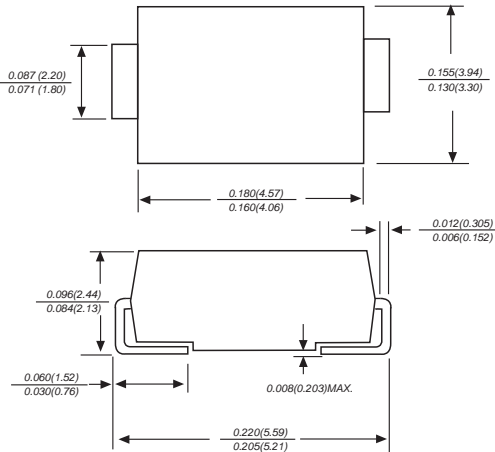


SK82 THRU SK810

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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

DO-214AA/SMB



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-214AA molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight : 0.003 ounce, 0.093 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%.

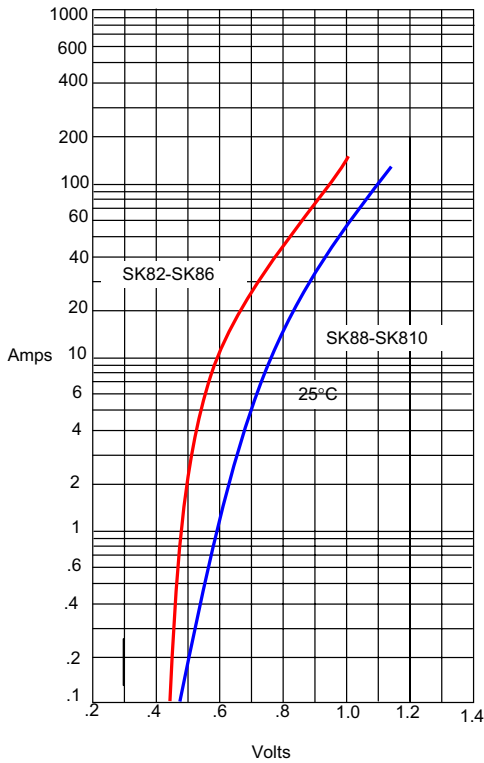
MDD Catalog Number	SYMBOLS	SK82	SK83	SK835	SK84	SK845	SK86	SK88	SK810	UNITS
Marking code		MDD SK82	MDD SK83	MDD SK835	MDD SK84	MDD SK845	MDD SK86	MDD SK88	MDD SK810	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	35	40	45	60	80	100	VOLTS
Maximum RMS voltage	V_{RMS}	14	21	24.5	28	31.5	42	56	70	VOLTS
Maximum DC blocking voltage	V_{DC}	20	30	35	40	45	60	80	100	VOLTS
Maximum average forward rectified current at $T_L = 95^\circ\text{C}$	$I_{(AV)}$	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 $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 100^\circ\text{C}$	I_R	1								mA
		20								
Typical junction capacitance (NOTE 1)	C_J	400								pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	18.0								$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-50 to +150								$^\circ\text{C}$
Storage temperature range	T_{STG}	-50 to +150								$^\circ\text{C}$

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



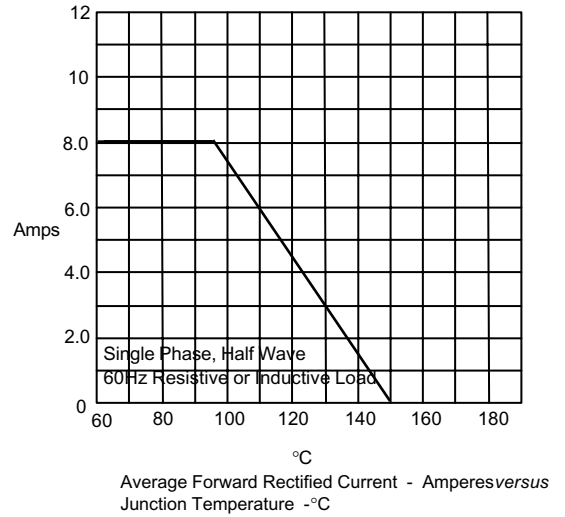
RATINGS AND CHARACTERISTIC CURVES SK82 THRU SK810

Figure 1
Typical Forward Characteristics



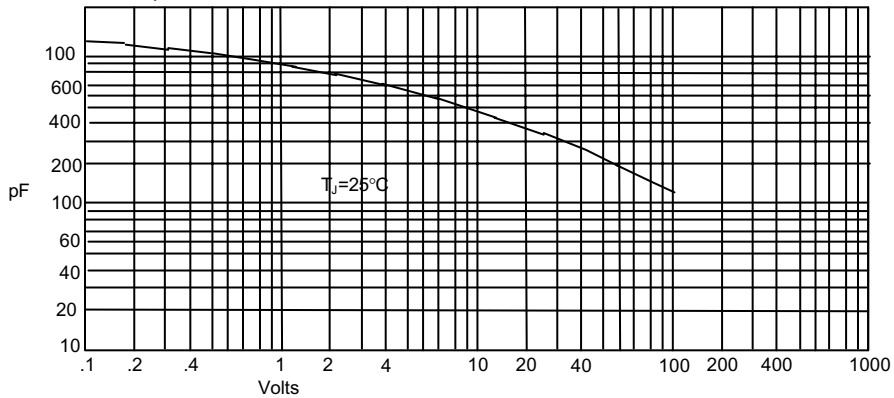
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



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

Figure 3
Junction Capacitance



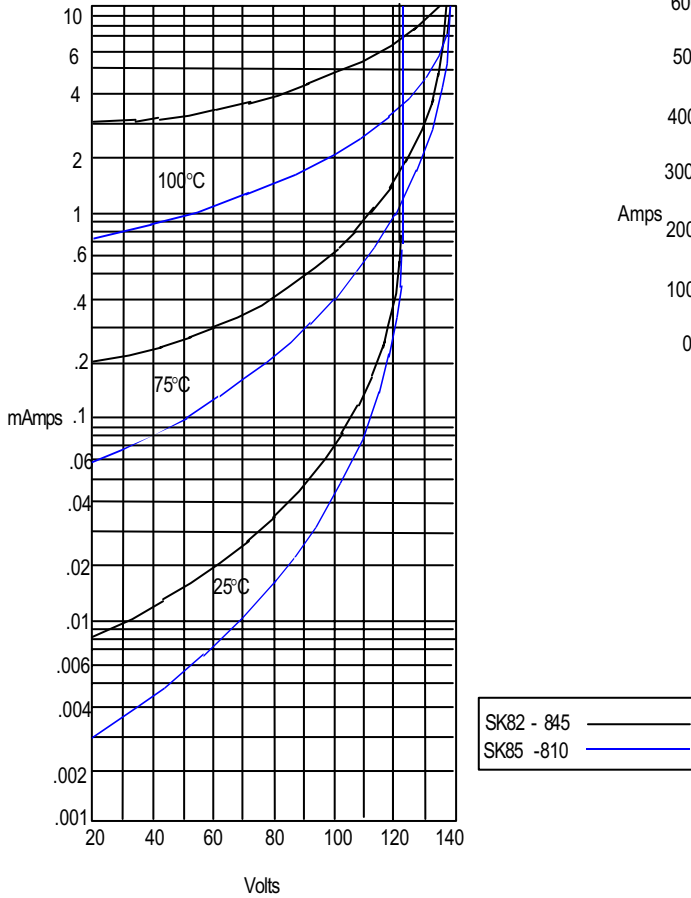
Junction Capacitance - pF versus
Reverse Voltage - Volts

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



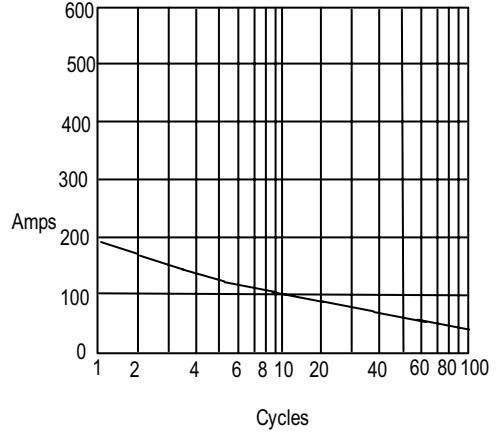
RATINGS AND CHARACTERISTIC CURVES SK82 THRU SK810

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

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



www.microsemi.com