

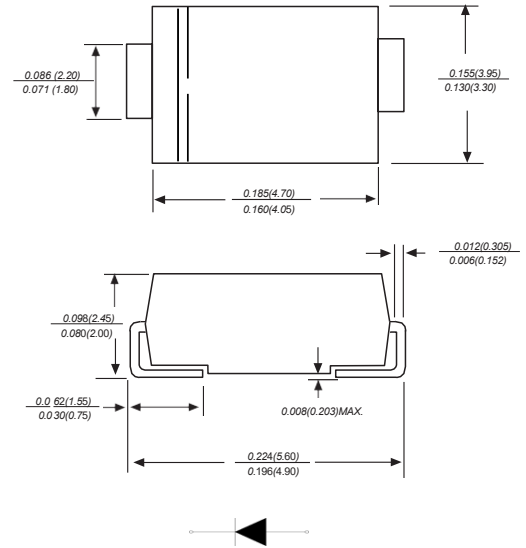
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250 °C/10 seconds at terminals

Case : JEDEC DO-214AA/SMB molded plastic body
 Terminals : Solderable per MIL-STD-750, Method
 Polarity : Color band denotes cathode end Mounting
 Position : Any
 Weight : 0.002 ounce, 0.07 grams

DO-214AA/SMB



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

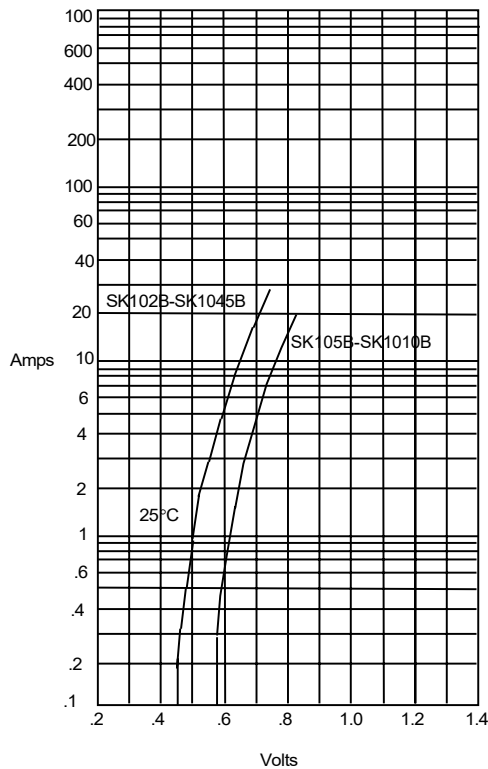
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	SK102B	SK103B	SK1035B	SK104B	SK1045B	SK106B	SK108B	SK1010B	UNITS
Marking Code										
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	35	40	45	60	80	100	V
Maximum RMS voltage	V _{RMS}	14	21	24.5	28	31.5	42	56	70	V
Maximum DC blocking voltage	V _{DC}	20	30	35	40	45	60	80	100	V
Maximum average forward rectified current at TL(see fig.1)	I _(AV)	10.0								A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	150								A
Maximum instantaneous forward voltage at 10.0A	V _F	0.55					0.65	0.85		V
Maximum DC reverse current T _A =25℃ at rated DC blocking voltage T _A =100℃	I _R	1.0								mA
		20.0								
Typical junction capacitance (NOTE 1)	C _J	500								pF
Typical thermal resistance (NOTE 2)	R _{θJA}	18.0								℃/W
Operating junction temperature range	T _J	-50 to +125								℃
Storage temperature range	T _{STG}	-50 to +150								℃

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

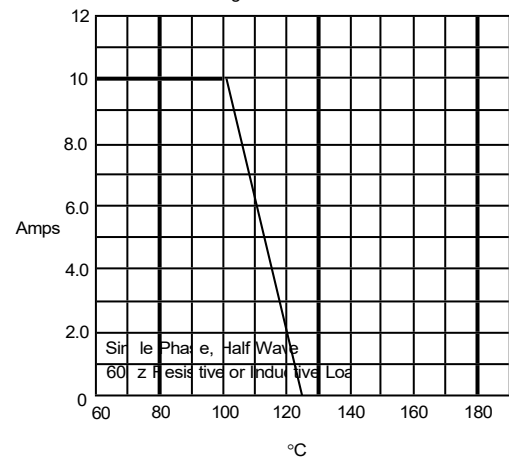
Typical Characteristics

Figure 1
Typical Forward Characteristics



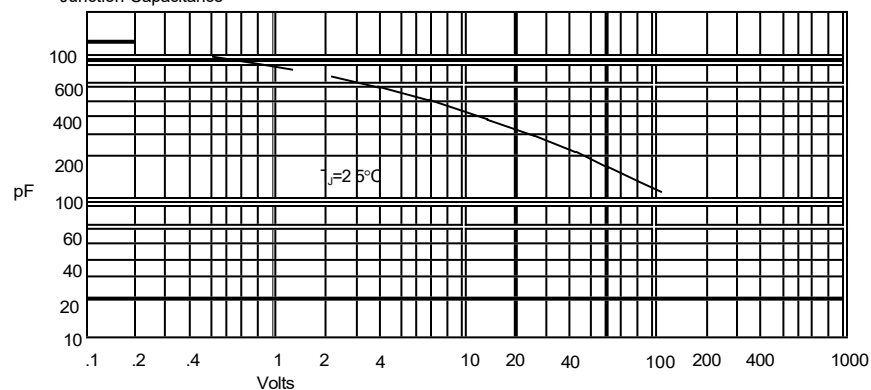
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



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

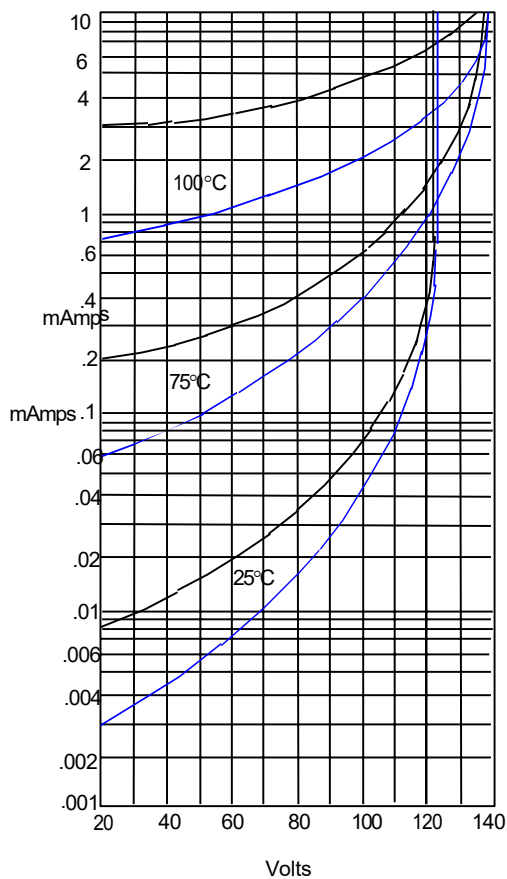
Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts

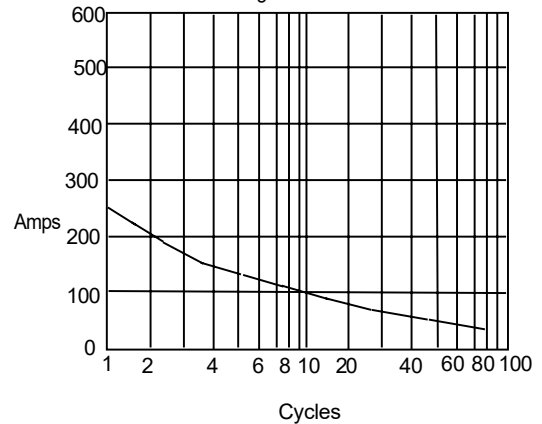
The curve above is for reference only.

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

SK102-SK1045 —
SK105-SK1010 —

The curve above is for reference only.