WILLAS

SK12B THRU SK120B

Pb Free Product

1.0AMP SCHOTTKY BARRIER RECTIFIERS

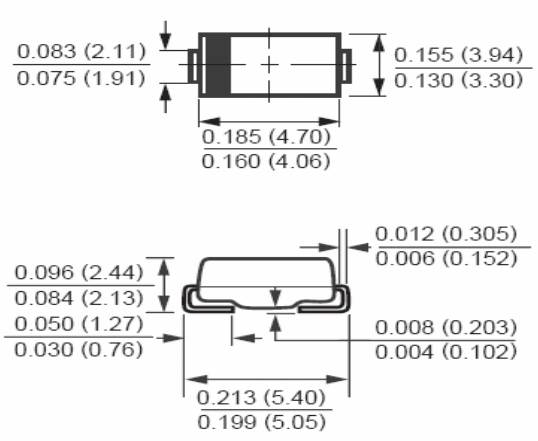
SMB PACKAGE

FEATURES

* Ideal for surface mounted applications
* Low leakage current
* Metallurgically bonded construction
* High reliability
* RoHS product for packing code suffix "G"
  Halogen free product for packing code suffix "H"

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-O rate flame retardant
* Mounting position: Any
* Weight: 0.104 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive of inductive load.
For capacitive load, derate current by 20%

RATINGS	SYMBOL	SK12B	SK13B	SK14B	SK15B	SK16B	SK18B	SK110B	SK115B	SK120B	UNIT
Marking Code		SK12B	SK13B	SK14B	SK15B	SK16B	SK18B	SK110B	SK115B	SK120B	
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	I_O	1.0									Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30.0									Amps
Typical Thermal Resistance	$R_{\Theta JA}$	50									℃/W
	$R_{\Theta JC}$	20									℃/W
Typical Junction Capacitance (Note 1)	C_J	70			60		50		35		pF
Operating Temperature Range	T_J	-55 to +125									℃
Storage Temperature Range	T_{STG}	-55 to +150									℃

CHARACTERISTICS		SYMBOL	SK12B	SK13B	SK14B	SK15B	SK16B	SK18B	SK110B	SK115B	SK120B	UNIT
Maximum Forward Voltage at 1.0A DC	@TA=25℃	V_F	0.50			0.70		0.85		0.87	0.90	Volts
Maximum Average Reverse Current at	@TA=25℃	I_R	0.5					0.2				mAmps
Rated DC Blocking Voltage	@TA=100℃		10.0					5.0				

Note : 1.Measured at 1 MHz and applied reverse voltage of 4.0 volts.

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FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

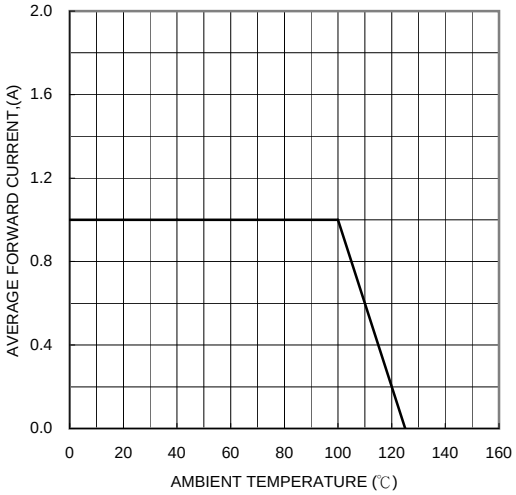

FIG. 2-TYPICAL FORWARD CHARACTERISTICS

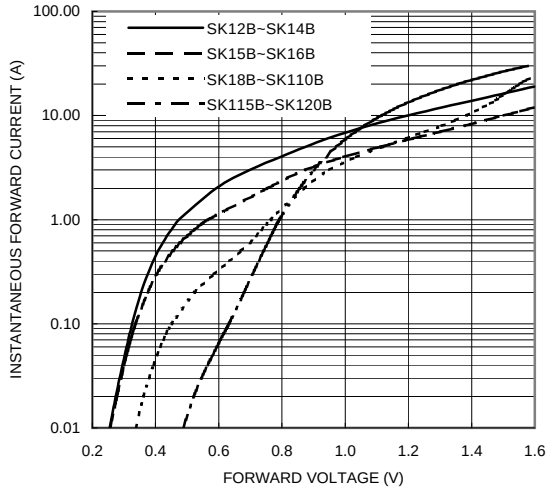

FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

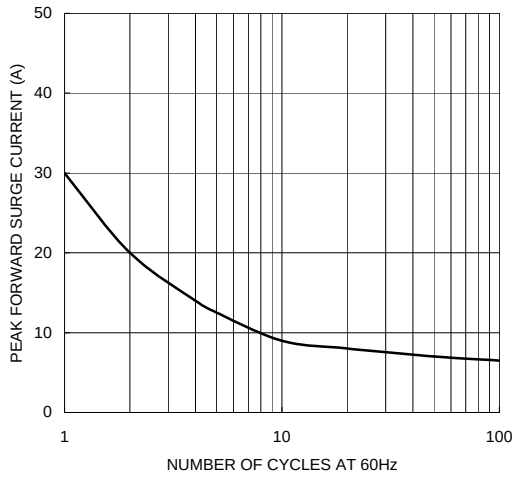

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

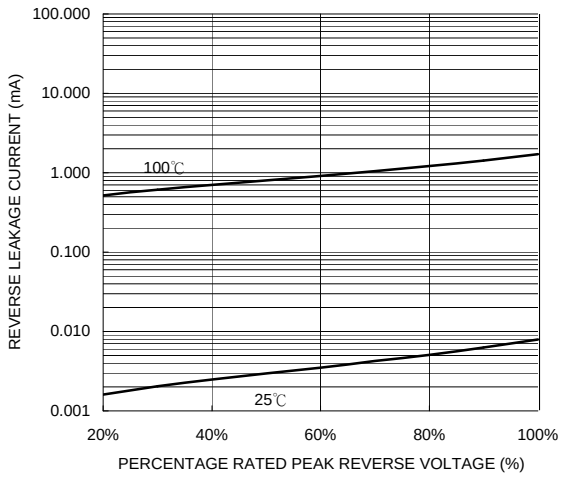

FIG. 5-TYPICAL JUNCTION CAPACITANCE