



WILLAS



5.0A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS -20V- 200V SMB PACKAGE

SK52B THRU SK520B

FEATURES

- * Ideal for surface mounted applications
- * Low switching noise
- * Low forward voltage drop
- * High current capability
- * High switching capability
- * High reliability
- * High surge capability
- * RoHS product for packing code suffix "G",
Halogen free product for packing code suffix "H".

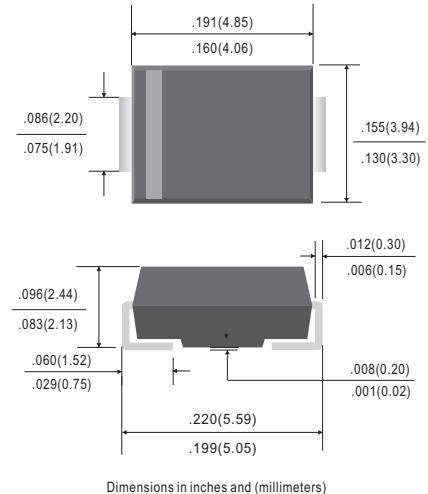
MECHANICAL DATA

Case: Molded plastic, DO-214AA(SMB)
Epoxy: UL 94V-O rate flame retardant
Lead:MIL-STD-202E method 208C guaranteed
Mounting position: Any
Weight: Approximated 0.1gram

Pb-Free package is available

RoHS product for packing code suffix "G"

Halogen free product for packing code suffix "H"



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, derate current by 20%

RATINGS	SYMBOL	SK52B	SK53B	SK54B	SK55B	SK56B	SK58B	SK510B	SK515B	SK520B	UNIT
Marking Code		SK52B	SK53B	SK54B	SK55B	SK56B	SK58B	SK510B	SK515B	SK520B	
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	5.0									Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	100.0									Amps
Typical Thermal Resistance (Note 2)	R _{ΘJA} /R _{ΘJC}	60/20									°C/W
Typical Junction Capacitance (Note 1)	C _J	300			210		170		150	110	pF
Operating Temperature Range	T _J	-55 to +125							-55 to +150		°C
Storage Temperature Range	T _{STG}	-55 to +150									°C

CHARACTERISTICS		SYMBOL	SK52B	SK53B	SK54B	SK55B	SK56B	SK58B	SK510B	SK515B	SK520B	UNIT	
Maximum Forward Voltage at 5.0A DC		V _F	0.55			0.70		0.85		0.87	0.90	Volts	
Maximum Average Reverse Current at Rated DC Blocking Voltage	@Ta=25°C	I _R	0.5										mAmps
	@Ta=100°C		20										

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance From Junction to Ambient , From Junction to Case on P.C.B. mounted 0.55*0.55"(14*14mm) copper pad areas.

RATING AND CHARACTERISTIC CURVES

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

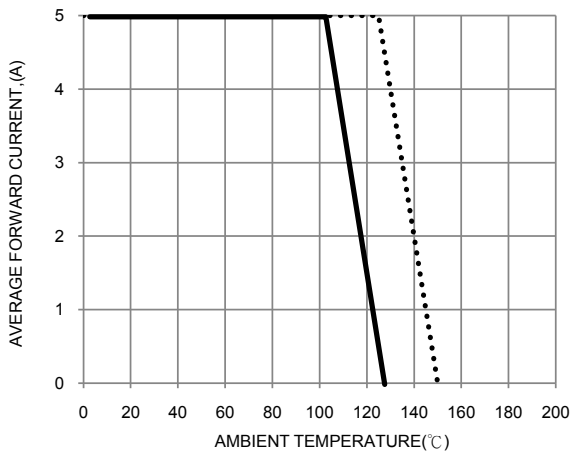


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

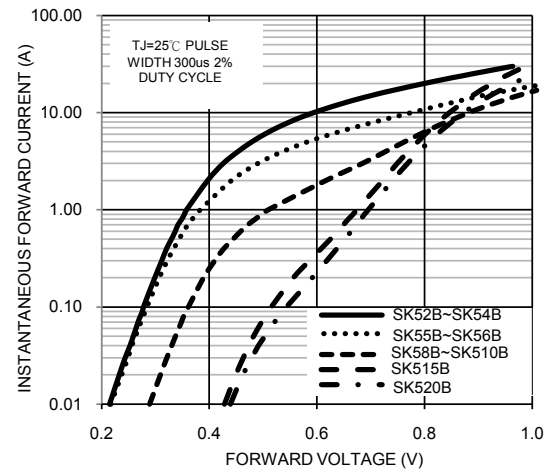


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

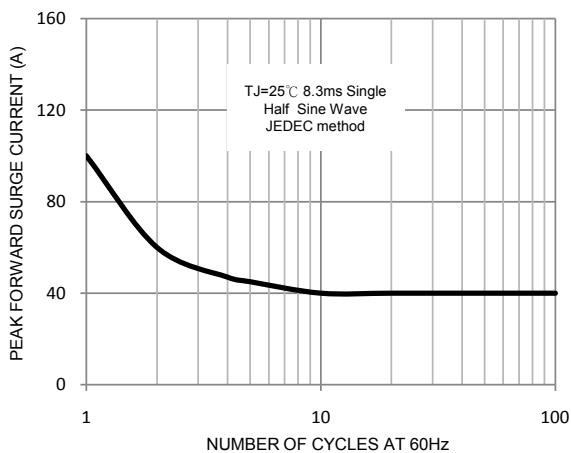


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

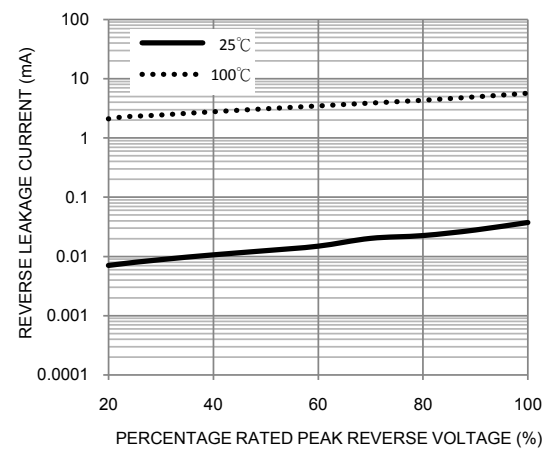
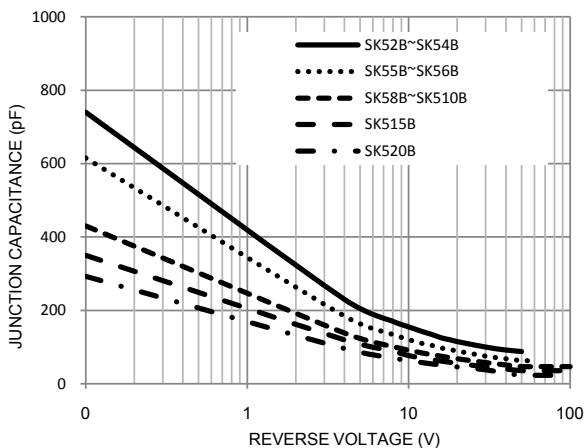


FIG. 5-TYPICAL JUNCTION CAPACITANCE



Ordering Information:

Device PN	Packing
Part Number -T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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