



# WILLAS



## SK52B THRU SK520B

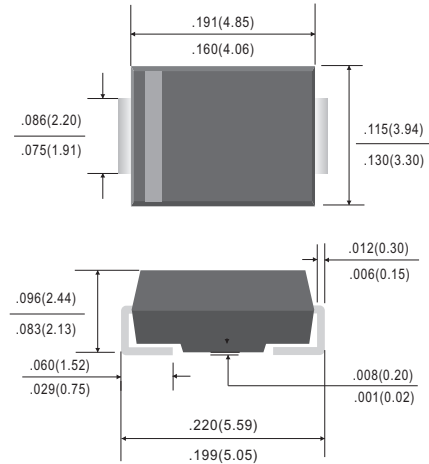
) '\$5 'GI F: 579'ACI BH'G7 <CHH?M6 5 FF-9F 'F97H- 9FG!&\$J!'&\$J  
GA6 "'D57?5; 9

### 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".  
Moisture Sensitivity Level 1

### 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



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, 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 <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	Volts	
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	105	140	Volts	
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	Volts	
Maximum Average Forward Rectified Current	I <sub>O</sub>	5.0									Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	100.0									Amps	
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub> /R <sub>θJC</sub>	60/20									°C/W	
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	300			210		170		150		110	pF
Operating Temperature Range	T <sub>J</sub>	-55 to +125					-55 to +150					°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150									°C	

CHARACTERISTICS	SYMBOL	SK52B	SK53B	SK54B	SK55B	SK56B	SK58B	SK510B	SK515B	SK520B	UNIT	
Maximum Forward Voltage at 5.0A DC	V <sub>F</sub>	0.55			0.70		0.85		0.87		0.90	Volts
Maximum Average Reverse Current at	I <sub>R</sub>	0.5									mAmps	
Rated DC Blocking Voltage		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

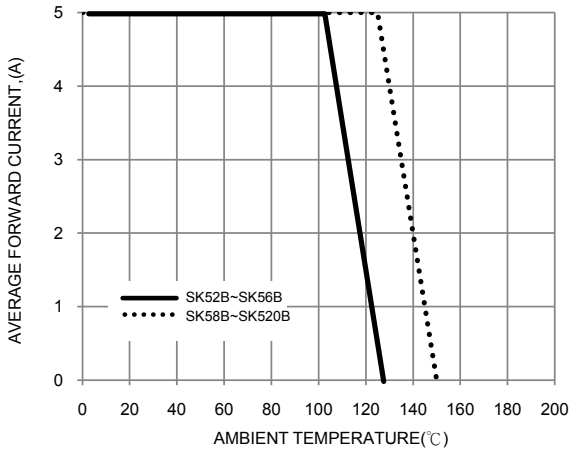


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

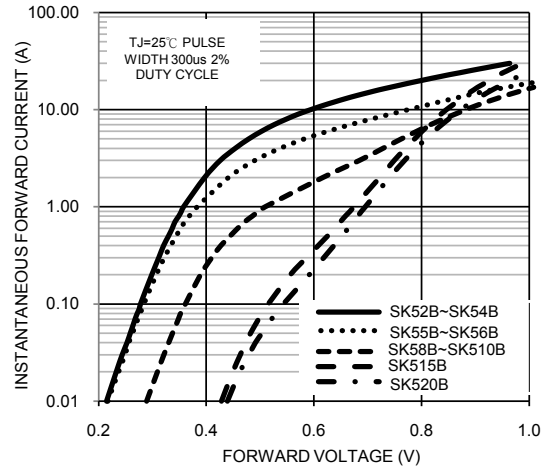


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

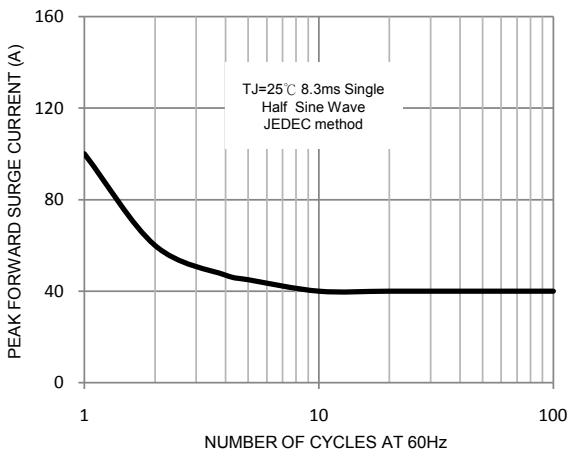


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

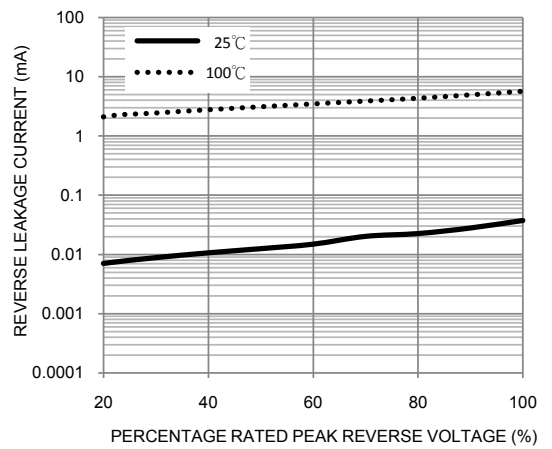
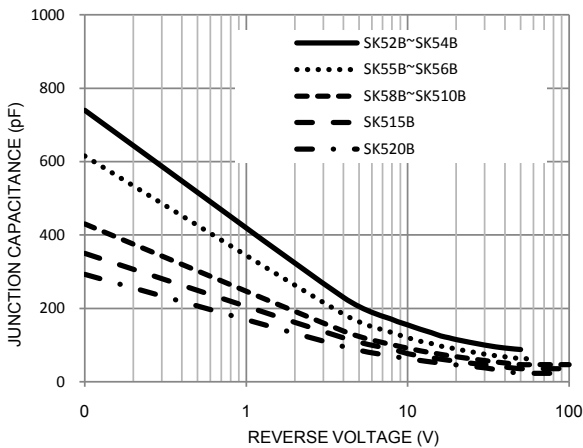


FIG. 5-TYPICAL JUNCTION CAPACITANCE



**Ordering Information:**

Device PN	Packing
Part Number -T <sup>(1)</sup> G <sup>(2)</sup> -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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