

# Kingtronics®

## SR520 THRU SR5100

### SCHOTTKY BARRIER RECTIFIER

**REVERSE VOLTAGE 20 to 100 Volts    FORWARD CURRENT 5.0 Ampere**

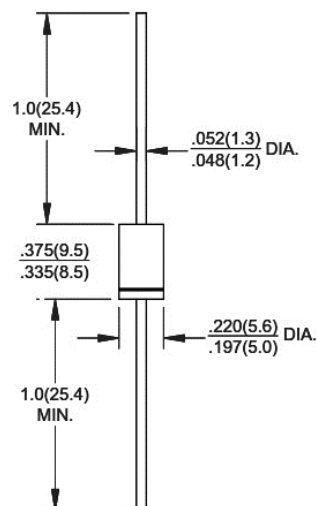
#### FEATURES

- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High reliability

#### MECHANICAL DATA

- Case: DO-27, Mold plastic
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Indicated by cathode band
- Lead: MIL-STD-202E, Method 208 guaranteed
- Mounting position: Any

#### DO-201AD (DO-27)



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%

PARAMETER	SYMBOL	SR 520	SR 530	SR 540	SR 550	SR 560	SR 580	SR 5100	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	VOLTS
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	VOLTS
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	VOLTS
Maximum Average Forward Rectified Current	$I_{(AV)}$	5.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150							Amps
Maximum instantaneous forward voltage at 5.0A	$V_F$	0.55		0.70		0.85		VOLTS	
Maximum DC Reverse Current at Rated DC blocking voltage	$I_R$	$T_A = 25^\circ C$							mA
		$T_A = 100^\circ C$							
Typical Junction Capacitance (NOTE 1)	$C_J$	500		400			pF		
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	10							$^\circ C/W$
Operating temperature range	$T_J$	-55 to +125							$^\circ C$
Storage temperature range	$T_{STG}$	-55 to +150							$^\circ C$

1- Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.

2-Thermal Resistance from Junction to Ambient at .375" (9.5mm)lead length, P.C. board mounted.

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## RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

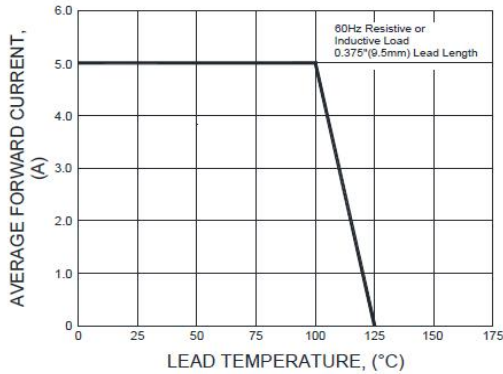


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

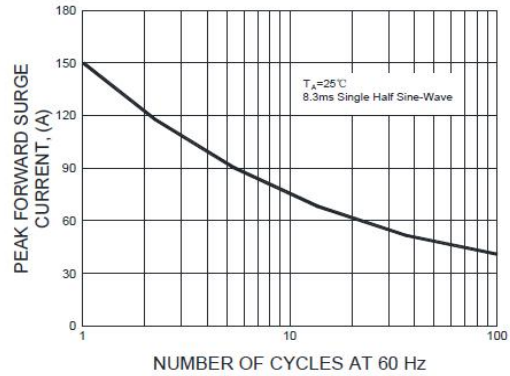


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

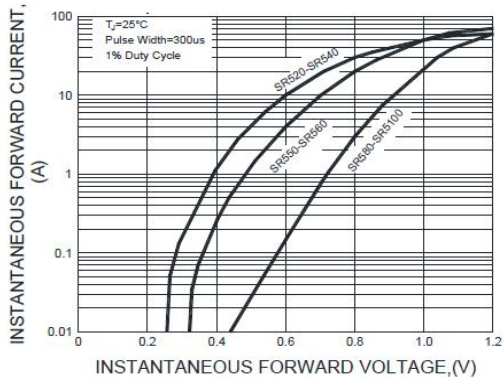


FIG.4-TYPICAL REVERSE CHARACTERISTICS

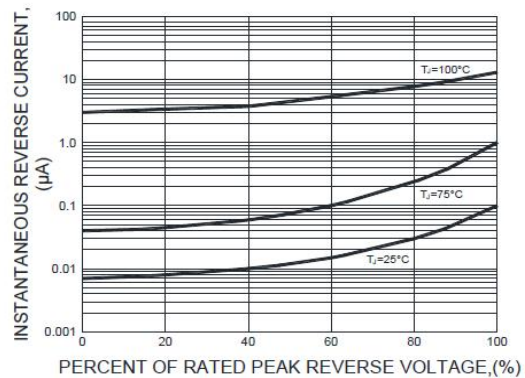
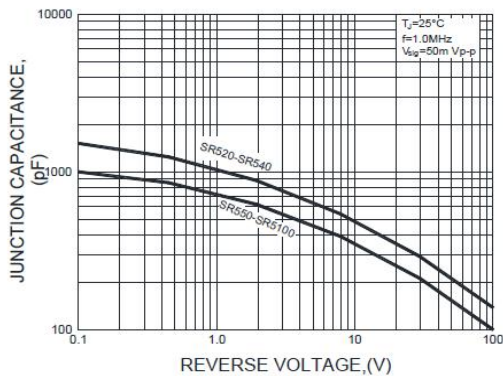


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice.

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