



## SCHOTTKY BARRIER RECTIFIER

# SR2020 THRU SR2060

VOLTAGE RANGE  
CURRENT

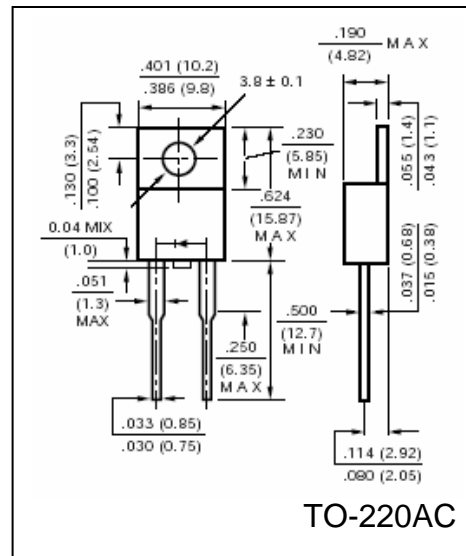
20 to 60 Volts  
16.0 Ampere

### FEATURES

- Fast switching
- Low forward voltage
- Low power loss for high efficiency
- High Surge capability
- High temperature Soldering guaranteed:  
250°C/10 seconds, 0.25" (6.35mm) lead length
- Also available with reverse polarity, add and "R" suffix,  
i.e. SR2020R
- Also available in an isolate package, SRF2020
- Also available in a dual diode version, SR2020C

### MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Solderable per MIL-STD-202E  
Method 208C
- Polarity: as marked
- Mounting Position: Any, 5.0 in-lbs Torque Max
- Weight: 0.064 ounce, 1.81 gram



### 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%

	SYMBOLS	SR 2020	SR 2030	SR 2035	SR 2040	SR 2045	SR 2050	SR 2060	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	35	40	45	50	60	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	25	38	32	35	42	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	35	40	45	50	60	Volts
Maximum Average Forward Rectified Current, (Note 1) $T_A = 135^\circ\text{C}$	$I_{(AV)}$	20							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 @ 20.0A (Note 1)	$V_F$	0.65					0.75		Volts
Maximum DC Reverse Current at Rated $T_A = 25^\circ\text{C}$	$I_R$	5.0							mA
DC Blocking Voltage per element (Note 1) $T_A = 100^\circ\text{C}$		30			50				
Typical Thermal Resistance, per leg	$R_{\theta JC}$	3.0							$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_J$	(-55 to +150)							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	(-55 to +150)							$^\circ\text{C}$

### Notes:

1. Pulse test: 300µS pulse width, 1% duty cycle



# RATINGS AND CHARACTERISTIC CURVES SR2020 THRU SR2060

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

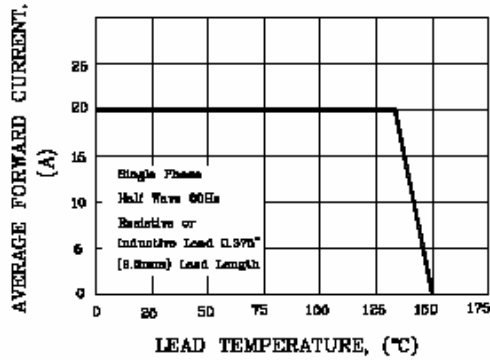


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

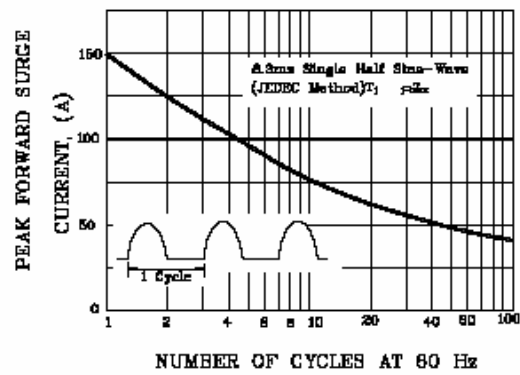


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

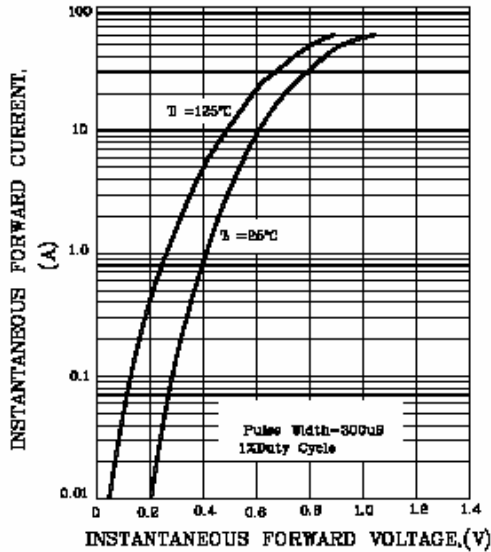


FIG.4-TYPICAL REVERSE CHARACTERISTICS

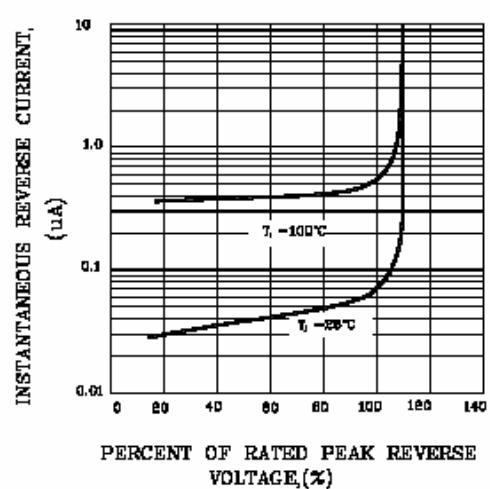


FIG.5-TYPICAL JUNCTION CAPACITANCE

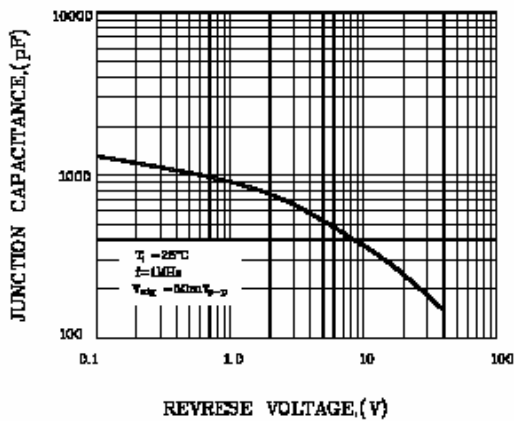


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

