



SCHOTTKY BARRIER RECTIFIER

SR3020C THRU SR3060C

VOLTAGE RANGE
CURRENT

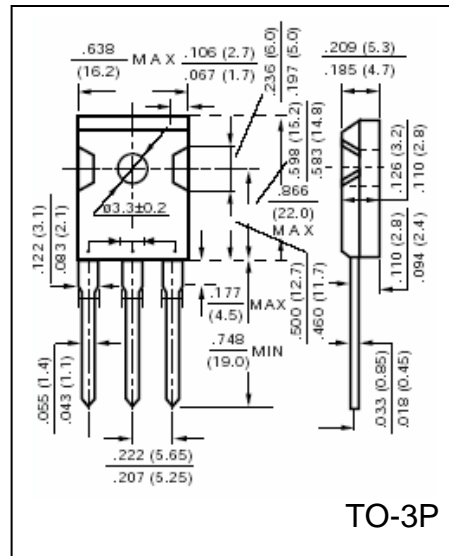
20 to 60 Volts
30.0 Ampere

FEATURES

- Dual Diode Device
- Fast switching
- Low forward voltage
- Low power loss for high efficiency
- High Surge capability
- High temperature Soldering guaranteed:
250 °C/10 seconds, 0.17" (4.3mm) lead length
- Also available with common Anode, add an "A" suffix,
i.e. SR3020A, and as a doubler, add an "D" suffix,
i.e. SR3020D

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, 10 in-lbs Torque Max
- Weight: 0.22 ounce, 6.3 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 3020	SR 3030	SR 3035	SR 3040	SR 3045	SR 3050	SR 3060	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) $T_L = 75^\circ\text{C}$ (SR3020C-3045C), $T_L = 100^\circ\text{C}$ (SR3050C-3080C)	$I_{(AV)}$	30.0							Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	300							Amps
Maximum Instantaneous Forward Voltage per leg @ 15.0A (Note 1)	V_F	0.65					0.75		Volts
Maximum DC Reverse Current at Rated $T_A = 25^\circ\text{C}$	I_R	10							mA
DC Blocking Voltage per element (Note 1) $T_A = 100^\circ\text{C}$		100							
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)	C_J	750					500		pF
Typical Thermal Resistance , per leg	$R_{\theta JC}$	1.4							°C/W
Operating Junction Temperature Range	T_J	(-65 to +125)					(-65 to +150)		°C
Storage Temperature Range	T_{STG}	(-65 to +150)							°C

Notes:

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



RATINGS AND CHARACTERISTIC CURVES SR3020C THRU SR3060C

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

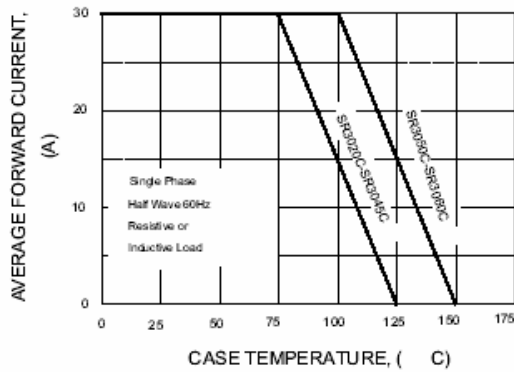


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

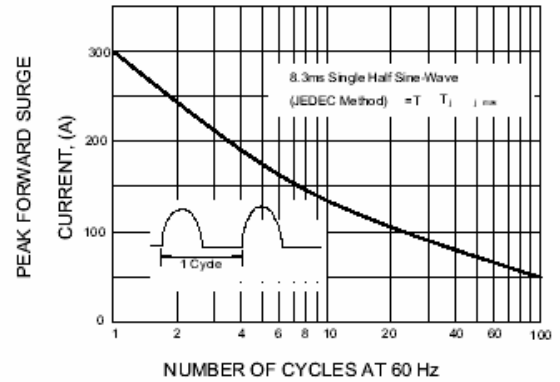


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

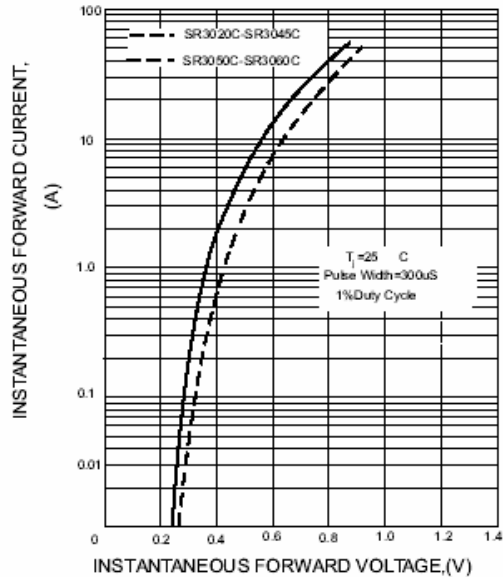


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER LEG

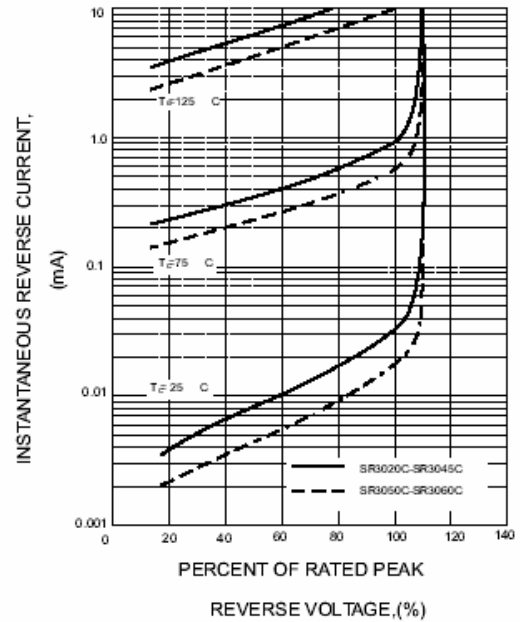


FIG.5-TYPICAL JUNCTION CAPACITANCE PER LEG

