



FUKUCOM COMPANY LTD.

福 靈 有 限 公 司

FLAT P, 3/F, EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,
KWUN TONG, KOWLOON, HONG KONG.
TEL: 2790-0314 FAX: 2790-0206



SCHOTTKY BARRIER RECTIFIER

SR1020 THRU SR1080

VOLTAGE RANGE
CURRENT

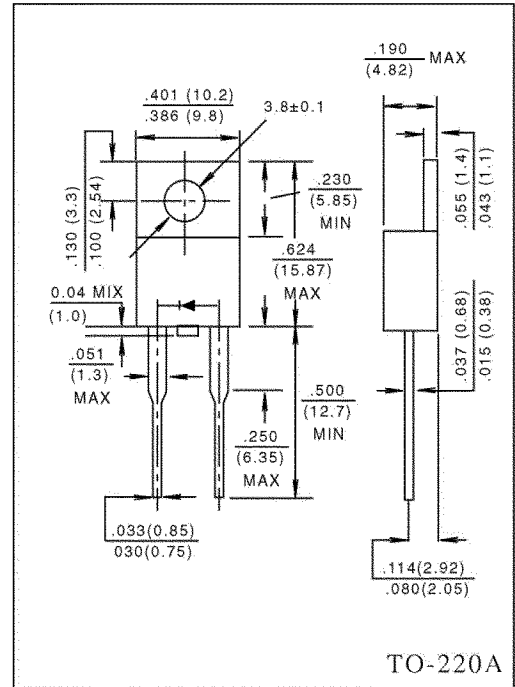
20 to 80 Volts
10 Ampere

FEATURES

- Fast switching.
- Low forward voltage, high current capability.
- Low power loss, high efficiency.
- High current surge capability.
- High temperature soldering guaranteed:
250°C/10 seconds, 0.16" (4.06mm) lead length from case.

MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V - 0 rate flame retardant.
- Polarity: As marked.
- Lead: Plastic lead, solderable per MIL - STD - 202E method 208C
- Mounting position : Any, 5 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 1020	SR 1030	SR 1035	SR 1040	SR 1045	SR 1050	SR 1060	SR 1070	SR 1080	UNIT		
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	20	30	35	40	45	50	60	70	80	Volts		
Maximum RMS Voltage		V_{RMS}	14	21	25	28	32	35	42	49	56	Volts		
Maximum DC Blocking Voltage		V_{DC}	20	30	35	40	45	50	60	70	80	Volts		
Maximum Average Forward Rectified Current at	$T_C = 90^\circ C$ (SR820-845) $T_C = 85^\circ C$ (SR850-870)	$I_{(AV)}$	10									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 (Note 1) at	10A 20A	V_F	0.65			0.75			0.80		0.84	0.95	-	Volts
Maximum DC Reverse Current at rated DC blocking voltage (Note 1)	$T_A = 25^\circ C$ $T_A = 100^\circ C$	I_R	50									50	mA	
Typical Junction Capacitance (Note 2)		C_j	580					480					pF	
Typical Thermal Resistance (Note 3)		$R_{\theta JC}$	2.0									°C/W		
Operating Temperature Range		T_J	(-65 to +125)					(-65 to +150)					°C	
Storage Temperature Range		T_{STG}	(-65 to +150)									°C		

NOTES:

1. Pulse test: 300 μ s pulse width, 1% duty cycle.
2. Measured at 1MHz and applied reverse voltage of 4.0 volts.
3. Thermal resistance from junction to case.



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RATINGS AND CHARACTERISTIC CURVES SR1020 THRU SR1080

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

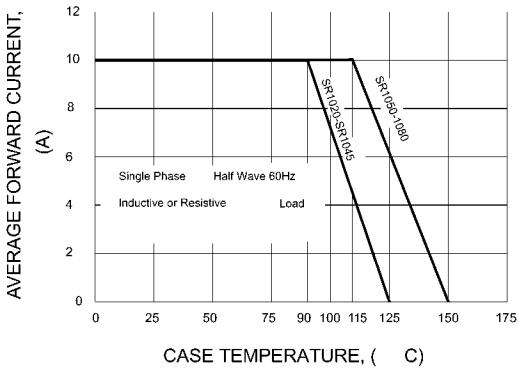


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

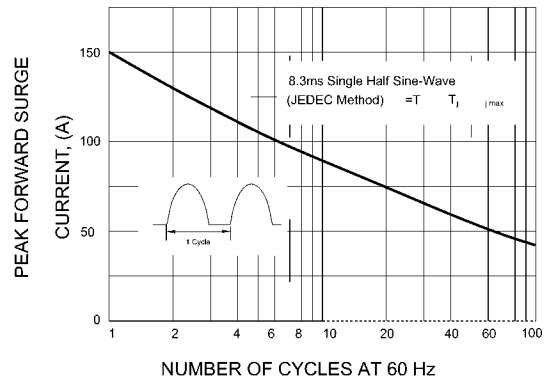


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

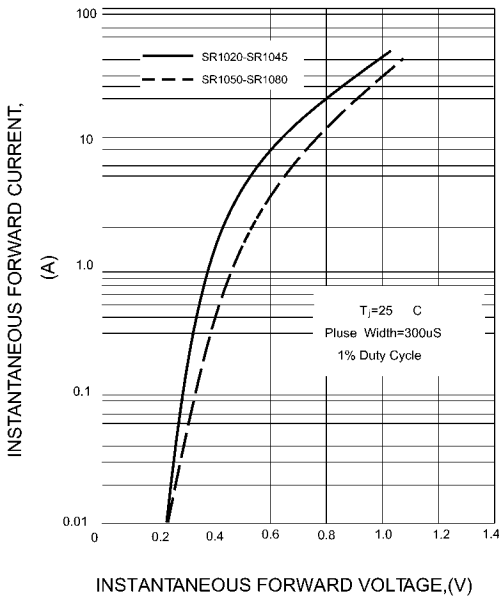


FIG.4-TYPICAL REVERSE CHARACTERISTICS

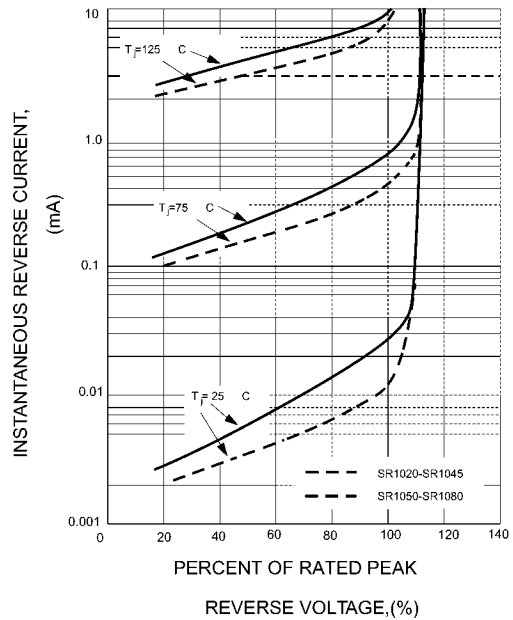


FIG.5-TYPICAL JUNCTION CAPACITANCE

