CUMSUMI®

RoHS compliant

20.0 AMPS. Schottky Barrier Rectifiers

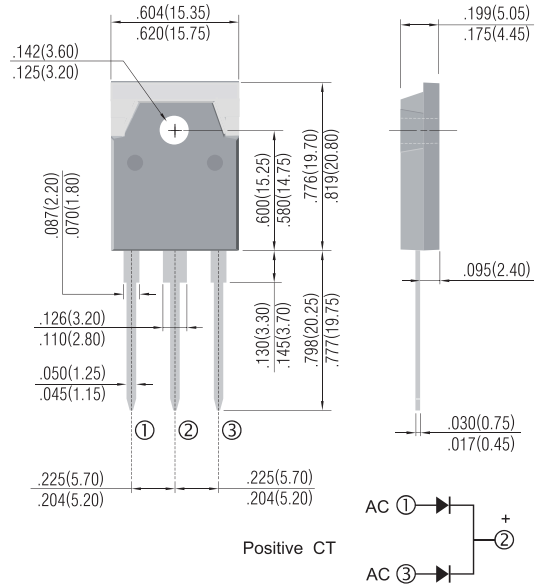
Features

- ✧ Dual rectifier construction, positive center-tap
- ✧ Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- ✧ Metal silicon junction, majority carrier conduction
- ✧ Low power loss, high efficiency
- ✧ High current capability, low VF
- ✧ High surge capability
- ✧ Epitaxial construction
- ✧ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- ✧ Guardring for transient protection
- ✧ High temperature soldering guaranteed: 260°C/10seconds,0.17"(4.3mm)lead lengths at 5 lbs., (2.3kg) tension

Mechanical Data

- ✧ Cases: JEDEC TO-3P/TO-247AD molded plastic
- ✧ Terminals: Pure tin plated, lead free. solderable per MIL-STD-750, Method 2026
- ✧ Polarity: As marked
- ✧ Mounting position: Any
- ✧ Weight: 0.2 ounce, 5.6 grams

TO-3P Unit: inch (mm)



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number	Symbol	SR 2020 P	SR 2030 P	SR 2040 P	SR 2050 P	SR 2060 P	SR 2090 P	SR 2100 P	SR 2150 P	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	90	100	150	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	63	70	105	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	90	100	150	V
Maximum Average Forward Rectified Current at Tc=105°C	$I_{(AV)}$	20								A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	200								A
Maximum Instantaneous Forward Voltage @10.0A (Note 3)	V_F	0.55			0.70		0.92		1.02	V
Maximum D.C. Reverse Current @ Tc=25°C	I_R	0.5					0.1			mA
at Rated DC Blocking Voltage @ Tc=100°C		15			10		5.0			mA
Typical Junction Capacitance (Note 2)	Cj	600			400		350			pF
Typical Thermal Resistance Per Leg (Note 1)	$R_{\theta JC}$	1.5								°C/W
Operating Junction Temperature Range	T_J	-65 to +125			-65 to +150					°C
Storage Temperature Range	TSTG	-65 to +150								°C

Notes:
1. Thermal Resistance from Junction to Case Per Leg, with Heatsink size of 4" x 6" x 0.25" Al-Plate.
2. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.
3. 300 us Pulse Width, 2% Duty Cycle

RATINGS AND CHARACTERISTIC CURVES (SR2020P THRU SR20150P)

FIG.1- FORWARD CURRENT DERATING CURVE

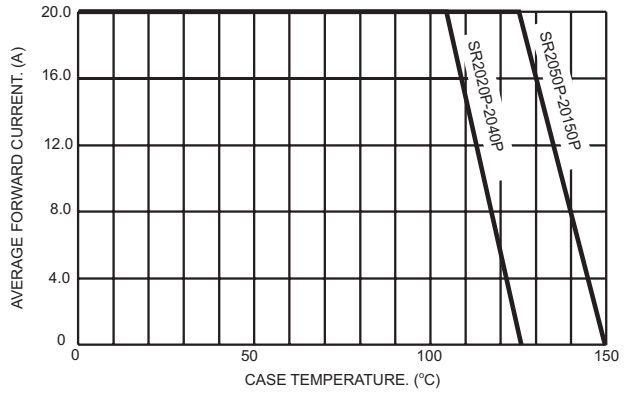


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

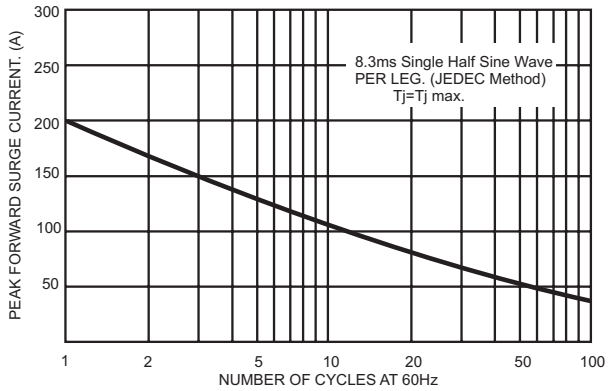


FIG.3- TYPICAL FORWARD CHARACTERISTICS

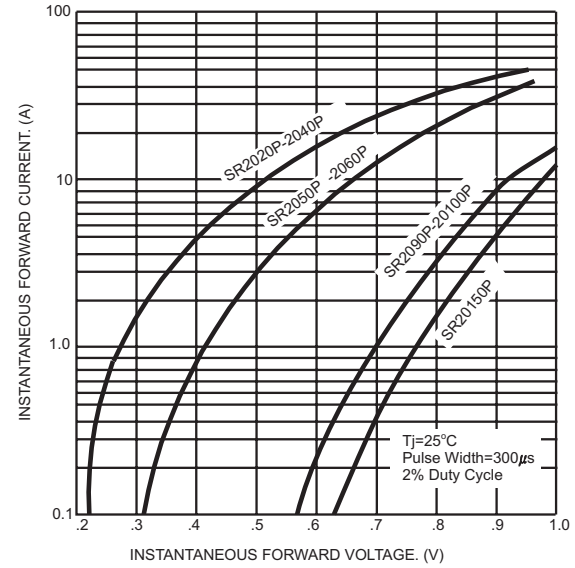


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER LEG

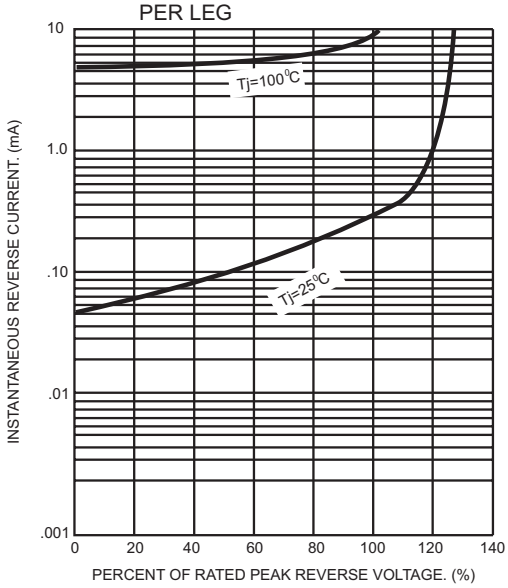


FIG.5- TYPICAL JUNCTION CAPACITANCE PER LEG

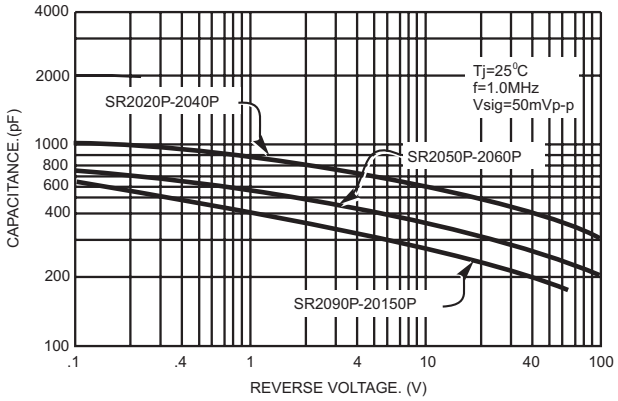
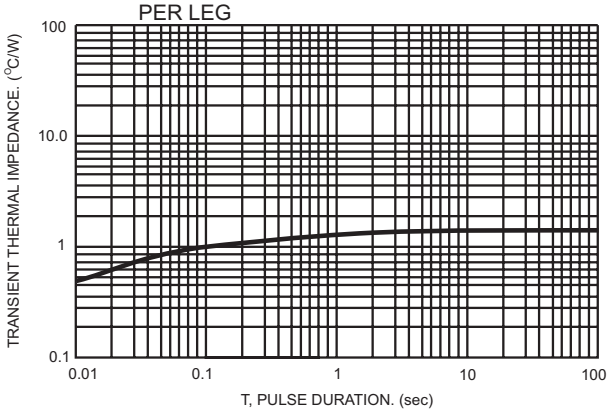


FIG.6- TYPICAL TRANSIENT THERMAL IMPEDANCE PER LEG



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