



SCHOTTKY BARRIER RECTIFIER

SR5020P THRU SR5060P

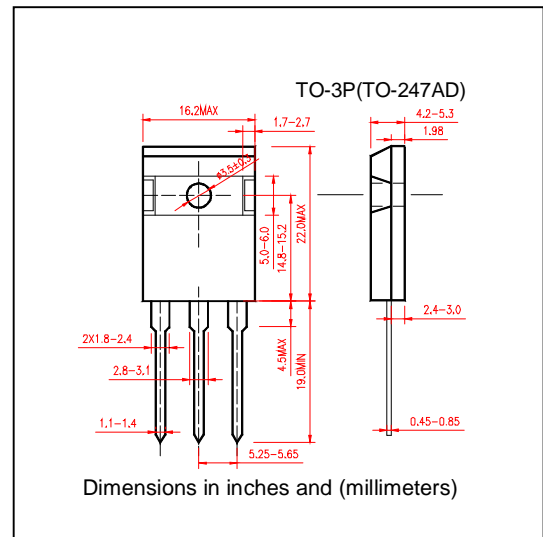
VOLTAGE RANGE 20 to 60 Volts
CURRENT 50.0 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency
- Low forward voltage, high current capability
- High surge capacity
- For use in low voltage, high frequency inverters. Free wheeling, and polarity protection applications

MECHANICAL DATA

- Case: TO-3P molded Plastic
- Terminals: Lead solderable per MIL-STD-202, Method 208
- Polarity: as marked
- Mounting position: Any
- Weight: 0.2ounce, 5.6 grams



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 5020P	SR 5030P	SR 5035P	SR 5040P	SR 5045P	SR 5050P	SR 5060P	SR 5080P	SR50 100P	SR50 150P	SR50 200P	UNIT	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	35	40	45	50	60	80	100	150	200	Volts	
Maximum RMS Voltage	V_{RMS}	14	21	25	28	32	35	42	56	70	105	140	Volts	
Maximum DC Blocking Voltage	V_{DC}	20	30	35	40	45	50	60	80	100	150	200	Volts	
Maximum Average Forward Rectified Current At $T_C=90^\circ\text{C}$	$I_{(AV)}$	50.0											Amps	
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	400											Amps	
Maximum Forward Voltage at 25.0A per element	V_F	0.65			0.72			0.75			0.85			Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	$T_C = 50^\circ\text{C}$	2.0											mA	
	$T_C = 100^\circ\text{C}$	100												
Typical Junction Capacitance(Note2)	C_j	700											pF	
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	0.8											$^\circ\text{C}/\text{W}$	
Operating Storage Temperature Range	$T_J T_{STG}$	(-55 to +150)											$^\circ\text{C}$	

Notes:

1. Thermal Resistance Junction to Ambient
2. Measured at $V_R=4\text{v}$ and $f=1\text{MHz}$



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RATINGS AND CHARACTERISTIC CURVES SR5020P THRU SR50200P

FIG.1-FORWARD CURRENT DERATING CURVE

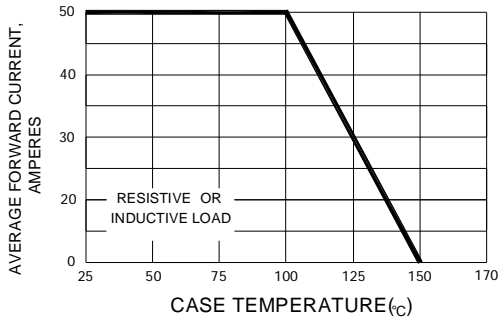


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

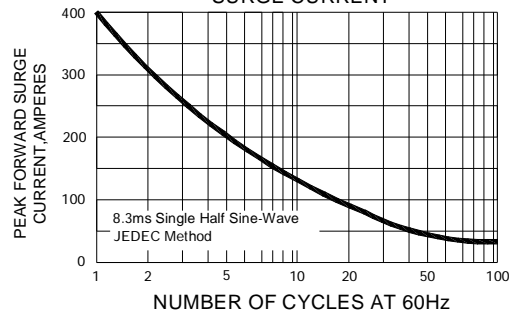


FIG.3-TYPICAL REVERSE CHARACTERISTICS

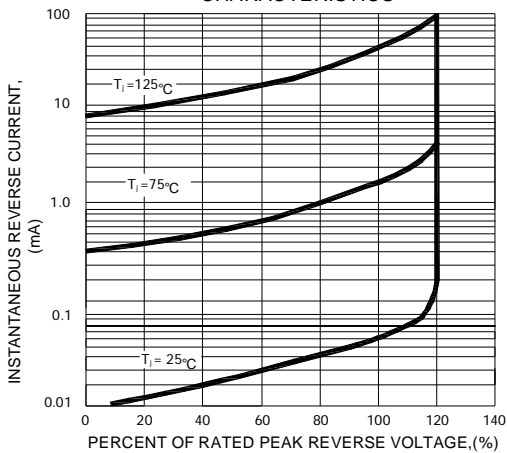


FIG.4-TYPICAL FORWARD CHARACTERISTICS

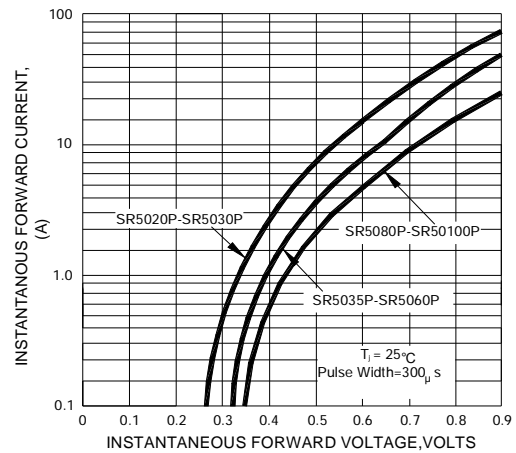


FIG.5-TYPICAL JUNCTION CAPACITANCE

