

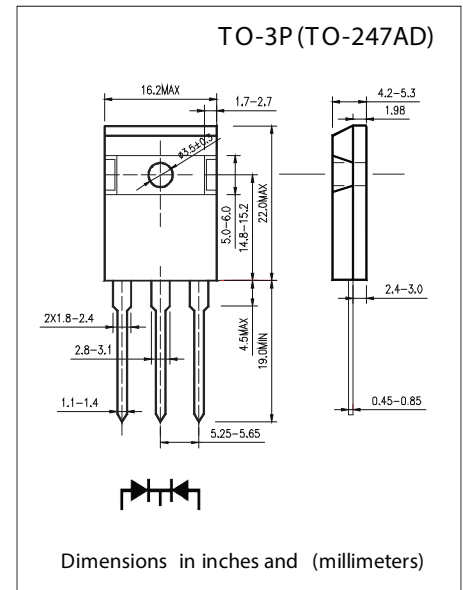
SCHOTTKY BARRIER RECTIFIER

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%.

PARAMETER	SYMBOLS	SR 5020CT	SR 5030CT	SR 5035CT	SR 5040CT	SR 5045CT	SR 5050CT	SR 5060CT	SR 5080CT	SR 50100CT	SR 50150CT	SR 50200CT	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	I_R	$T_c = 50^\circ\text{C}$											mA
		$T_c = 100^\circ\text{C}$											
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 SR5020CT - SR50200CT

FIG.1-FORWARD CURRENT DERATING CURVE

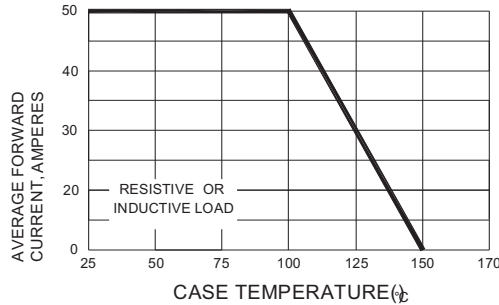


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

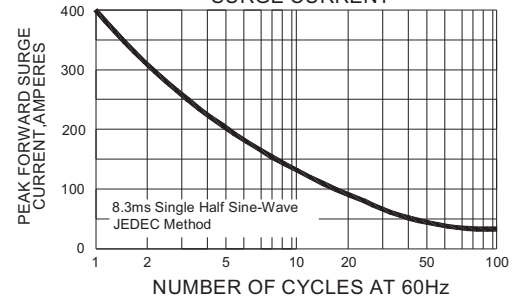


FIG.3-TYPICAL REVERSE CHARACTERISTICS

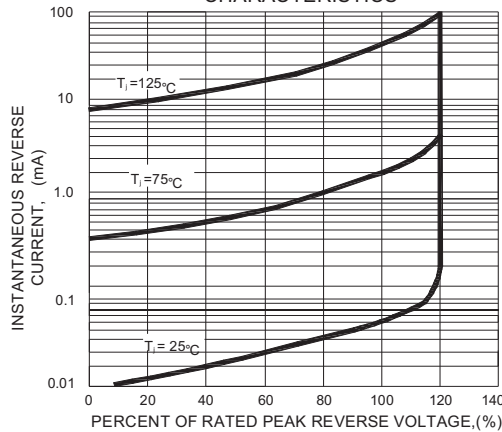


FIG.4-TYPICAL FORWARD CHARACTERISTICS

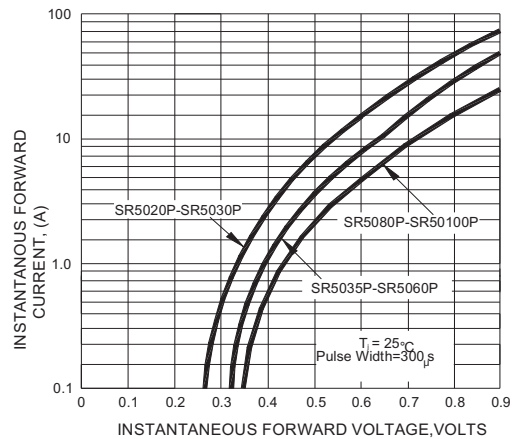
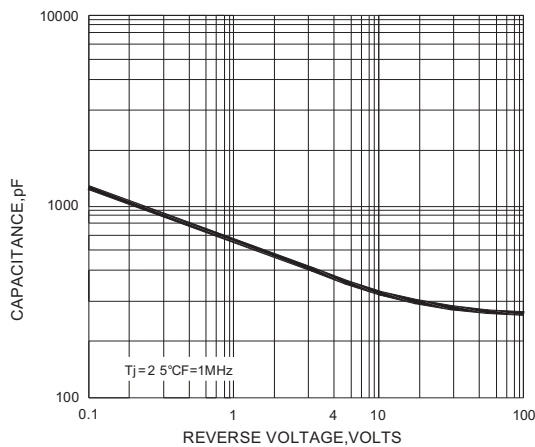


FIG.5-TYPICAL JUNCTION CAPACITANCE



Disclaimer

All product, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.