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8A SCHOTTKY BARRIER RECTIFIERS

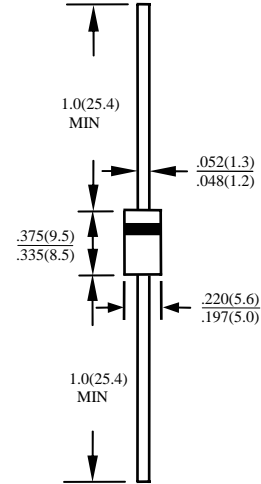
SR803 THRU SR806

FEATURES

- EXTREMELY LOW VF
- LOW STORED CHARGE, MAJORITY CARRIER CONDUCTION
- LOW POWER LOSS / HIGH EFFICIENCY
- UL 94V0 FLAME RETARDANT EPOXY MOLDING COMPOUND

MECHANICAL DATA

- CASE; TRANSFER MOLDED, DO201AD, DIMENSIONS IN INCHES AND (MILLIMETERS)
- LEADS: SOLDERABLE PER MIL-STD-202, METHOD 208
- POLARITY: CATHODE INDICATED BY COLOR BAND
- WEIGHT: 1.2 GRAMS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS 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%

RATINGS	SYMBOL	SR803	SR804	SR805	SR806	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	30	40	50	60	V
MAXIMUM RMS VOLTAGE	V_{RMS}	21	28	35	42	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	30	40	50	60	v
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT 0.375" (9.5mm) LEAD LENGTH (SEE FIG.1)	I_O	8.0				A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	150				A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	250		200		PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JL}$	5				°C/W
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 150				°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 125				°C

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	SR803	SR804	SR805	SR806	UNITS
MAXIMUM FORWARD VOLTAGE AT I_O DC	V_F	0.62		0.80		V
MAXIMUM REVERSE CURRENT AT 25°C	I_R	1.0				mA
MAXIMUM REVERSE CURRENT AT 100°C	I_R	10.0		20.0		mA

- NOTE: 1. PULSE TEST: 300 μ S PULSE WIDTH, 1% DUTY CYCLE
 2. MEASURED AT 1.0MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 V_{DC}
 3. THERMAL RESISTANCE FROM JUNCTION TO LEAD VERTICAL P.C.B. MOUNTING , 9.5mm LEAD LENGTH

RATINGS AND CHARACTERISTIC CURVES SR803 THRU SR806

FIG. 1 - FORWARD CURRENT DERATING CURVE

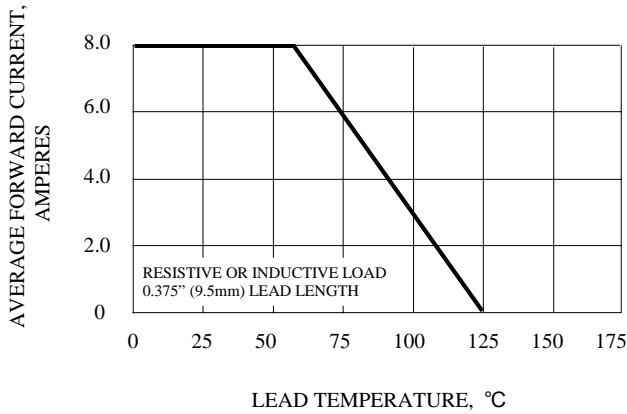


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

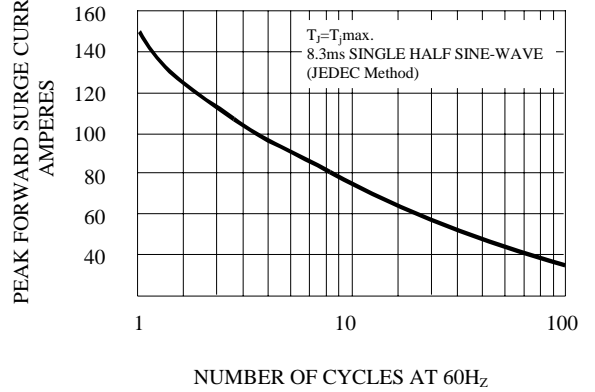


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

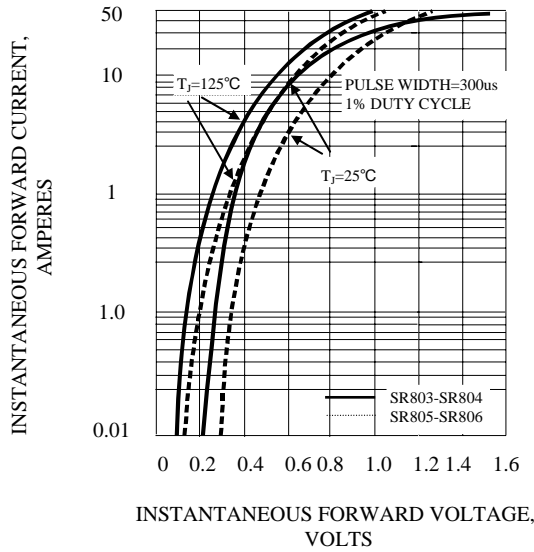


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

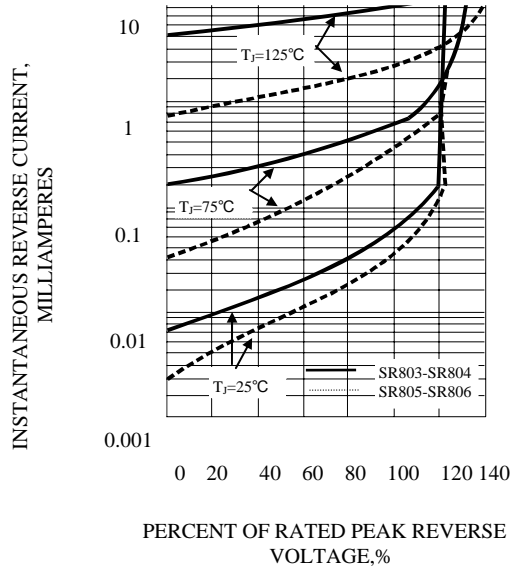


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

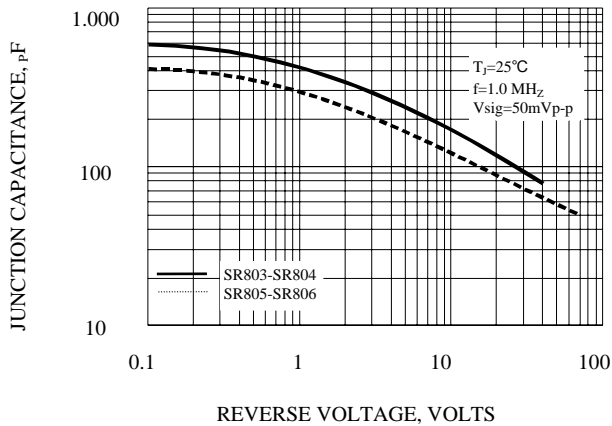


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

