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5A SCHOTTKY BARRIER RECTIFIERS

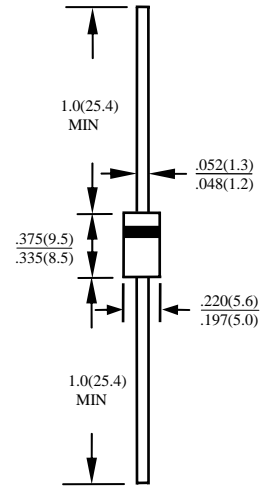
SR502 THRU SR510

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	SR502	SR503	SR504	SR505	SR506	SR507	SR508	SR509	SR510	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	20	30	40	50	60	70	80	90	100	V
MAXIMUM RMS VOLTAGE	V_{RMS}	14	21	28	35	42	49	56	63	70	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	20	30	40	50	60	70	80	90	100	V
AVERAGE FORWARD RECTIFIED CURRENT (SEE FIG.1)	I_o	5.0									A
NOM-REPETITIVE PEAK FORWARD SURGE CURRENT, 8.3mS HALF SINE-WAVE	I_{FSM}	150									A
TYPICAL JUNCTION CAPACITANCE (NOTE1)	C_j	200									PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta ja}$	25									°C/W
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 150									°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 125									°C

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

CHARACTERISTICS	SYMBOL	SR502	SR503	SR504	SR505	SR506	SR507	SR508	SR509	SR510	UNITS
MAXIMUM FORWARD VOLTAGE AT I_o DC	V_F	0.55			0.7		0.85				V
MAXIMUM REVERSE CURRENT AT 25°C	I_R	5.0									mA
MAXIMUM REVERSE CURRENT AT 100°C	I_R	50.0									mA

- NOTES: 1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. BOTH LEADS ATTACHED TO HEAT SINK AT LEAD LENGTH 5mm

RATING AND CHARACTERISTIC CURVES SR502 THRU SR510

FIG. 1 - FORWARD CURRENT DERATING CURVE

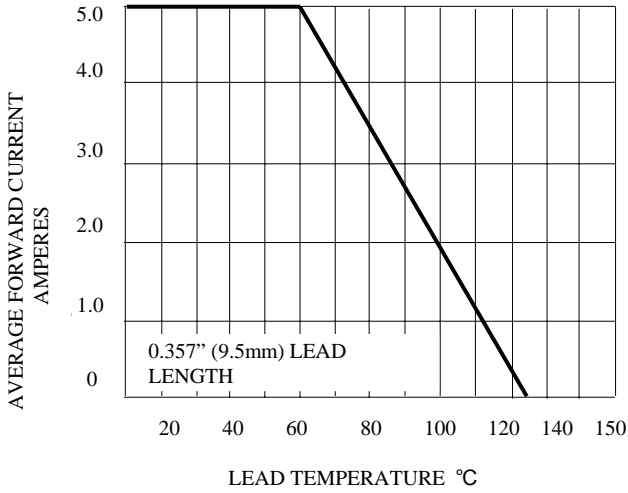


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

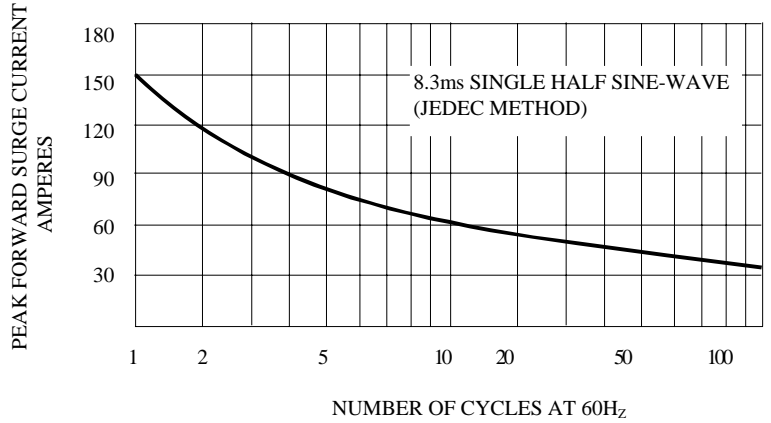


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

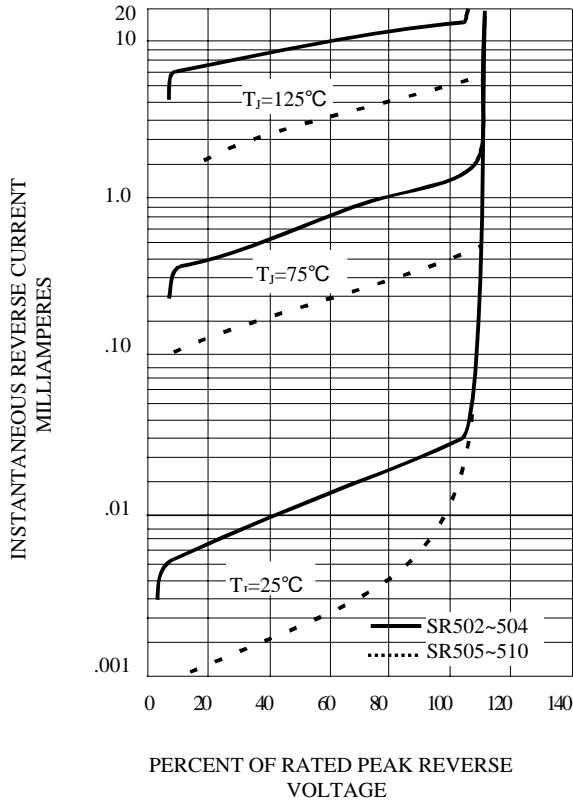


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

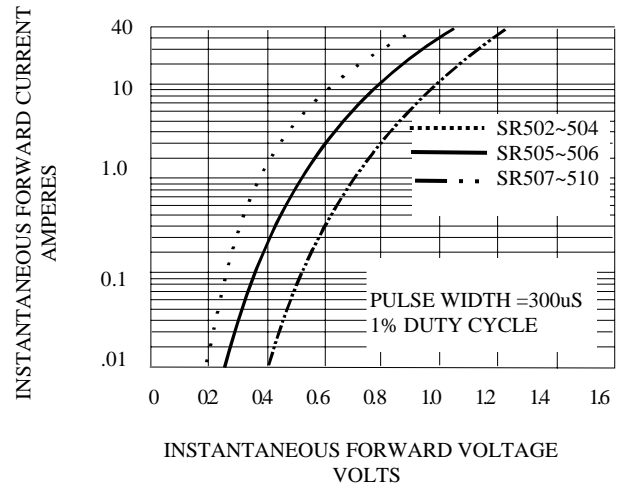


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

