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2A SURFACE MOUNT RECTIFIER

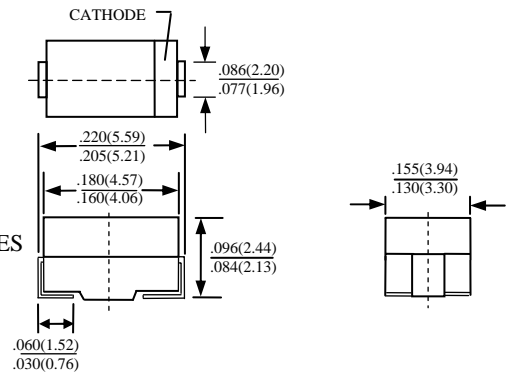
S2A-LFR THRU S2M-LFR

FEATURES

- LOW PROFILE PACKAGE
- PLASTIC PACKAGE HAS UNDERWRITERS LABORATORY 94V-0
- IDEAL FOR SURFACE MOUNTED APPLICATION
- GLASS PASSIVATED CHIP JUNCTION
- BUILT-IN STRAIN RELIEF DESIGN
- HIGH TEMPERATURE SOLDERING: 250°C/10 SECONDS AT TERMINAL
- ROHS

MECHANICAL DATA

- CASE: JEDEC DO-214AA MOLDED PLASTIC BODY, DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINAL: SOLDER PLATED, SOLDERABLE PER MIL-STD-750 METHOD 2026
- POLARITY: COLOR BAND DENOTES CATHODE
- WEIGHT: 0.093 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	S2A-LFR	S2B-LFR	S2D-LFR	S2G-LFR	S2J-LFR	S2K-LFR	S2M-LFR	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	50	100	200	400	600	800	1000	V
MAXIMUM RMS VOLTAGE	V_{RMS}	35	70	140	280	420	560	700	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	50	100	200	400	600	800	1000	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT AT $T_i=80^\circ\text{C}$	I_O	2.0							A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	50							A
TYPICAL JUNCTION CAPACITANCE (NOTE)	C_J	30							PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JL}$	16							°C/W
STORAGE TEMPERATURE RANGE	T_{STG}	-55 TO + 150							°C
OPERATING TEMPERATURE RANGE	T_{OP}	-55 TO + 150							°C

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

CHARACTERISTICS	SYMBOL	S2A-LFR	S2B-LFR	S2D-LFR	S2G-LFR	S2J-LFR	S2K-LFR	S2M-LFR	UNITS
MAXIMUM FORWARD VOLTAGE AT I_O DC	V_F	1.1							V
MAXIMUM REVERSE CURRENT AT 25°C	I_R	5.0							μA
MAXIMUM REVERSE CURRENT AT 125°C	I_R	50							μA
MARKING		S2A	S2B	S2D	S2G	S2J	S2K	S2M	

NOTE : 1. MEASURED AT 1MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS

2. THERMAL RESISTANCE FROM JUNCTION TO LEAD P.C.B. MOUNTED ON 0.3x0.3" (8.0x8.0mm) COPPER PAD AREAS

RATINGS AND CHARACTERISTIC CURVE S2A-LFR THRU S2M-LFR

FIG. 1- FORWARD CURRENT DERATING CURVE

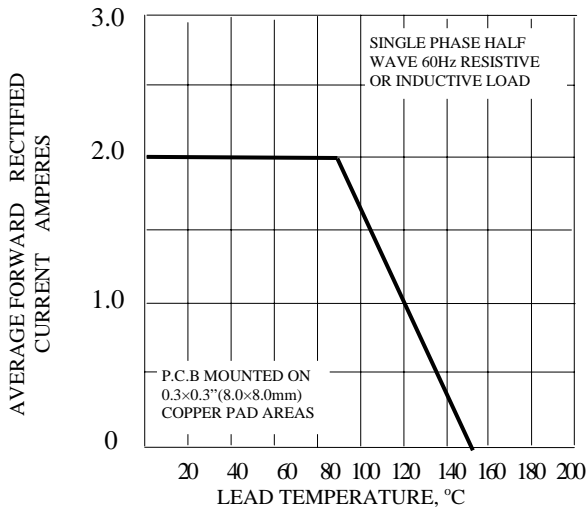


FIG. 2 -TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

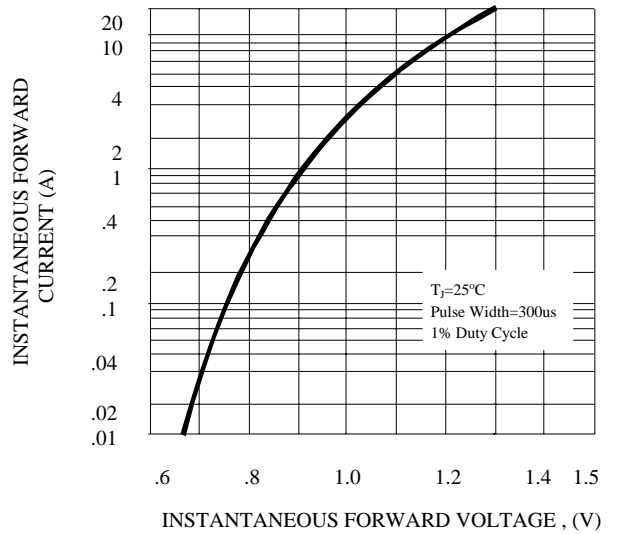


FIG. 3 -PEAK FORWARD SURGE CURRENT

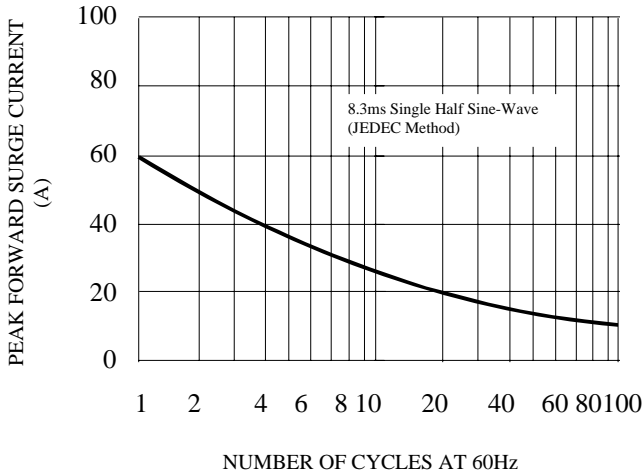


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

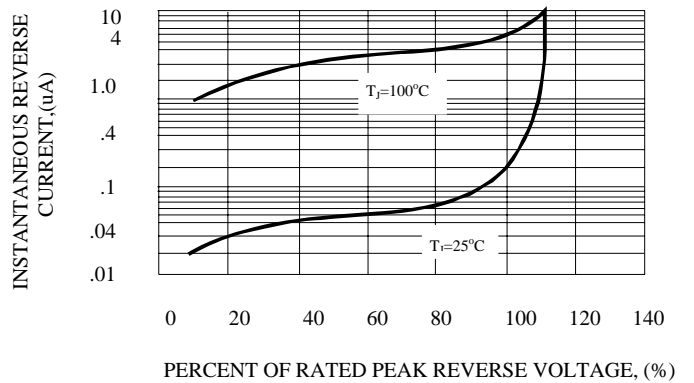


FIG. 5 -TYPICAL JUNCTION CAPACITANCE

