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2A SURFACE MOUNT RECTIFIER

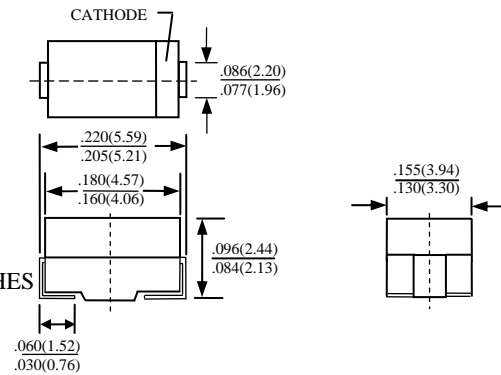
S2A THRU S2M

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

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	S2B	S2D	S2G	S2J	S2K	S2M	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 $T_J=80^\circ\text{C}$	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							$^\circ\text{C}/\text{W}$
STORAGE TEMPERATURE RANGE	T_{STG}	-55 TO + 150							$^\circ\text{C}$
OPERATING TEMPERATURE RANGE	T_{OP}	-55 TO + 150							$^\circ\text{C}$

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

CHARACTERISTICS	SYMBOL	S2A	S2B	S2D	S2G	S2J	S2K	S2M	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 THRU S2M

FIG. 1 - FORWARD CURRENT DERATING CURVE

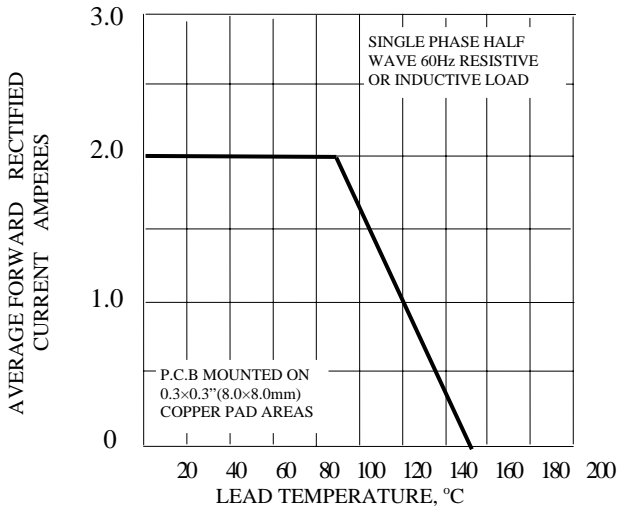


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

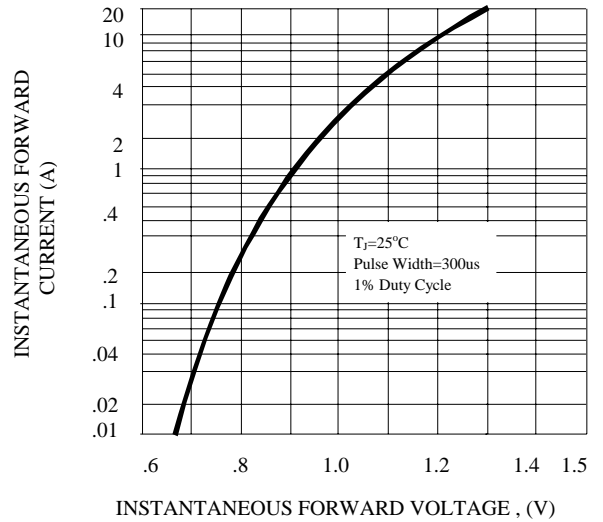


FIG. 3 - PEAK FORWARD SURGE CURRENT

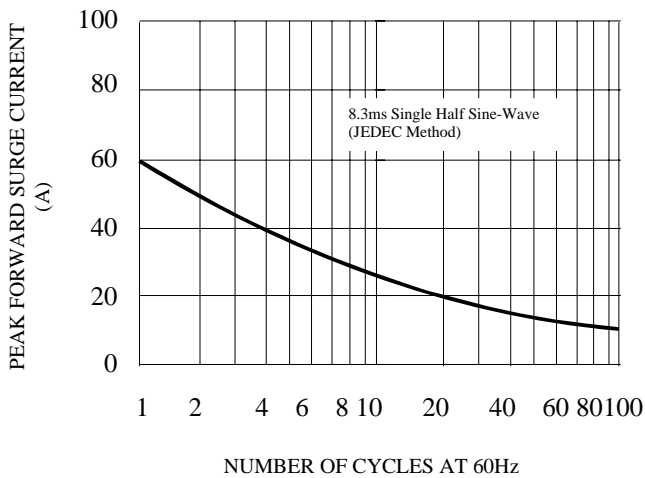


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

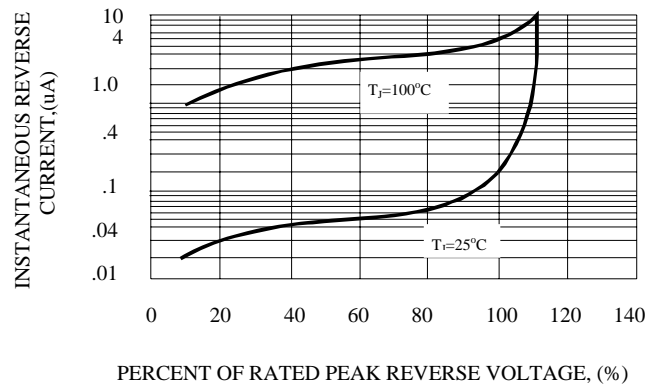


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

