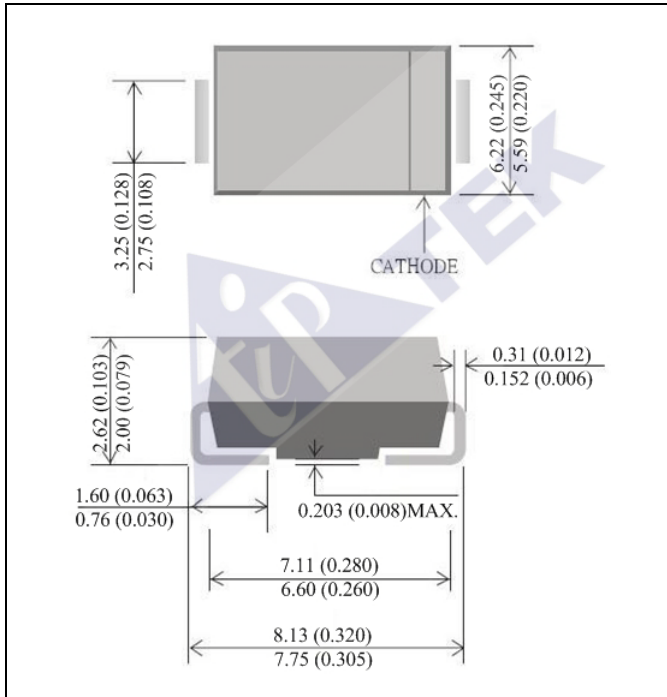


5A SURFACE MOUNT RECTIFIER



CASE : DO-214AB(SMC)

DIMENSIONS IN MILLIMETERS AND (INCHES)

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
- FAST SWITCHING FOR HIGH EFFICIENT
- HIGH TEMPERATURE SOLDERING : 260°C/10 SECONDS AT TERMINALS

MECHANICAL DATA

- CASE : JEDEC DO-214AB MOLDED PLAS BODY
- TERMINAL : SOLDER PLATED, SOLDERABLE PER MIL-STD-750 METHOD 2026
- POLARITY : COLOR BAND DENOTES CATHODE
- WEIGHT : 0.24 GRAMS
- Pb Free: S5A~S5M
Halogen Free: S5A-H~S5M-H

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.									
PARAMETER	SYMBOL	S5A	S5B	S5D	S5G	S5J	S5K	S5M	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 .375" (9.5mm) LEAD LENGTH AT $T_A=75^\circ\text{C}$	I_O	5.0							A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	100							A
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JL}$	15							°C/W
STORAGE TEMPERATURE RANGE	T_{STG}	-55 TO + 150							°C
OPERATING TEMPERATURE RANGE	T_J	-55 TO + 150							°C

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

PARAMETER	SYMBOL	S5A	S5B	S5D	S5G	S5J	S5K	S5M	UNITS
MAXIMUM FORWARD VOLTAGE AT 5A	V_F	1.15							V
MAXIMUM DC REVERSE CURRENT	I_R	10							μA
		250							
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	40							pF

- NOTE: 1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
 2. THERMAL RESISTANCE FROM JUNCTION TO LEAD P.C.B. MOUNTED ON 0.3×0.3" (8.0×8.0mm) COPPER PAD AREAS
 3. REVERSE RECOVERY TEST CONDITIONS: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

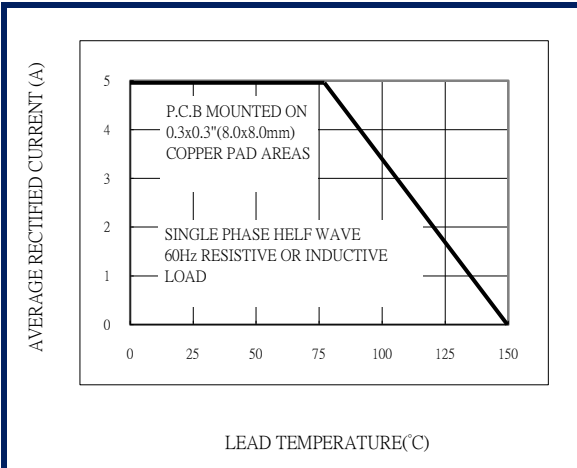


Fig.1-MAXIMUM CURRENT DERATING CURVE

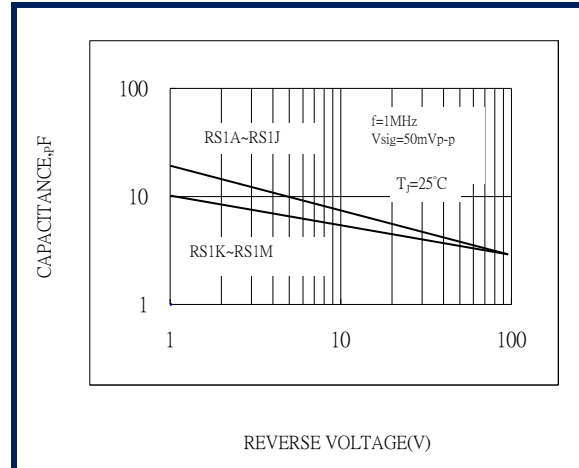


Fig.2-TYPICAL JUNCTION CAPACITANCE

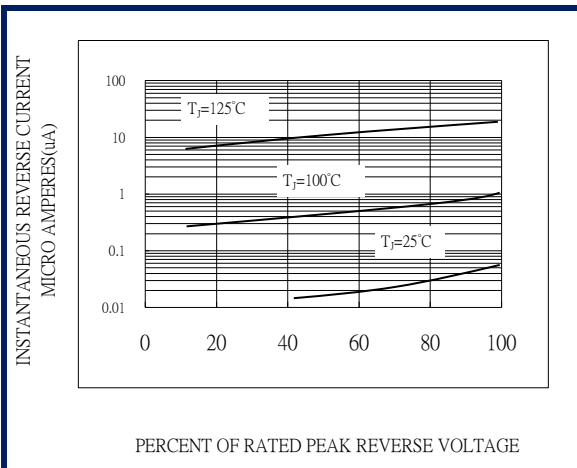


Fig.3-TYPICAL REVERSE CHARACTERISTICS

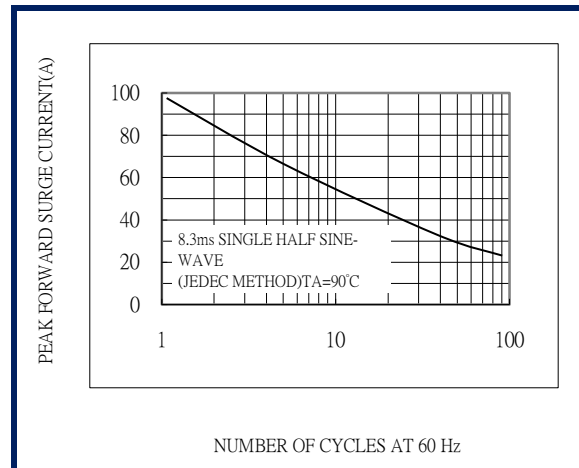


Fig.4-MAXIMUM FORWARD SURGE CURRENT

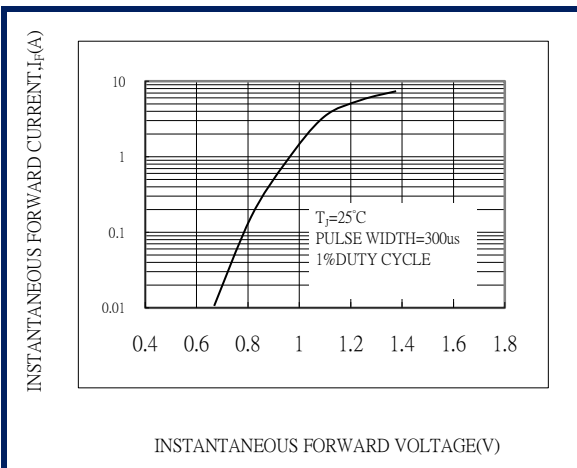


Fig.5-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

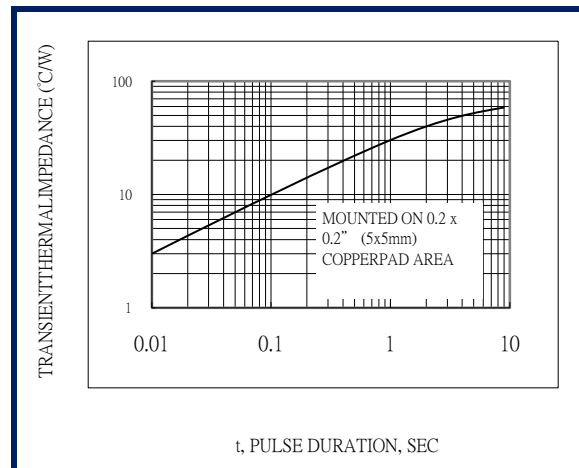


Fig.6-TYPICAL TRANSIENT THERMAL IMPEDANCE