

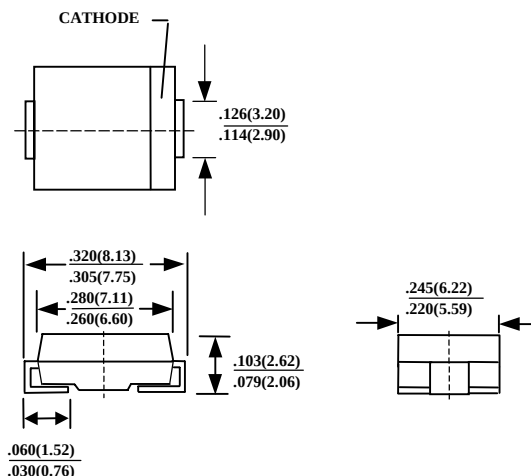
3A FAST RECOVERY SURFACE MOUNT RECTIFIER

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 : 250°C/10 SECONDS AT TERMINALS

MECHANICAL DATA

- CASE : JEDEC DO-214AA MOLDED PLAS BODY
- TERMINAL : SOLDER PLATED, SOLDERABLE PER MIL-STD-750 METHOD 2026
- POLARITY : COLOR BAND DENOTES CATHODE
- WEIGHT : 0.21 GRAMS



CASE:DO-214AB (SMC)
DIMENSIONS IN INCHES AND (MILLIMETERS)

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	RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M	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 $T_L=75^\circ\text{C}$	I_O	3.0							A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	100							A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	28							PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JL}$	15							$^\circ\text{C}/\text{W}$
STORAGE TEMPERATURE RANGE	T_{STG}	-55 TO + 150							$^\circ\text{C}$
OPERATING TEMPERATURE RANGE	T_{OP}	-55 TO + 150							$^\circ\text{C}$

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

CHARACTERISTICS	SYMBOL	RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M	UNITS
MAXIMUM FORWARD VOLTAGE AT $I_O=3.0\text{A}$	V_F	1.3							V
MAXIMUM REVERSE CURRENT AT 25°C	I_R	10							μA
MAXIMUM REVERSE CURRENT AT 125°C	I_R	250							μA
MAXIMUM REVERSE RECOVERY TIME (NOTE 3)	T_{RR}	150				250	500		nS
MARKING		RS3A	RS3B	RS3D	RS3G	RS3J	RS3K	RS3M	

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: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$

RATINGS AND CHARACTERISTIC CURVE RS3A THRU RS3M

FIG. 1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

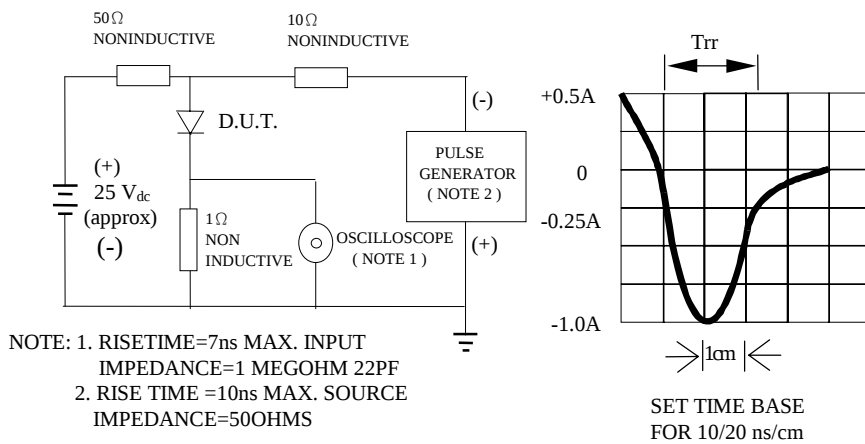


Fig. 2-MAXIMUM FORWARD CURRENT DERATING CURVE

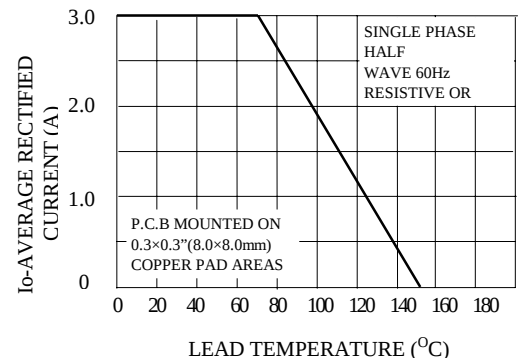


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

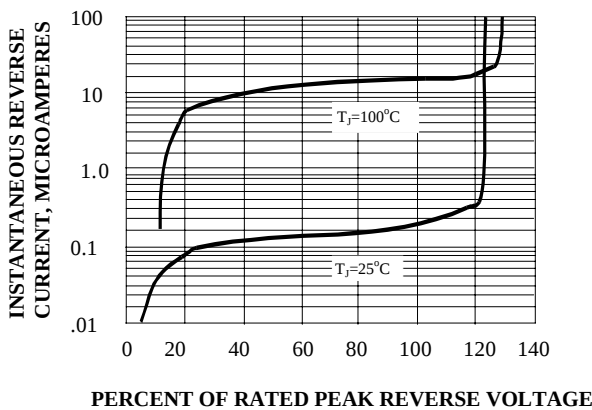


Fig. 4-MAXIMUM FORWARD SURGE CURRENT

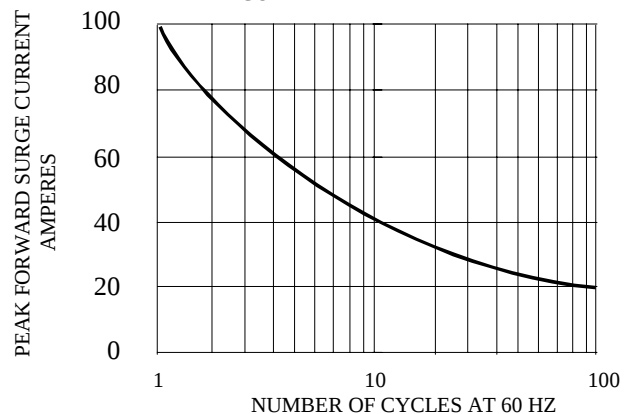


FIG. 5-TYPICAL JUNCTION CAPACITANCE

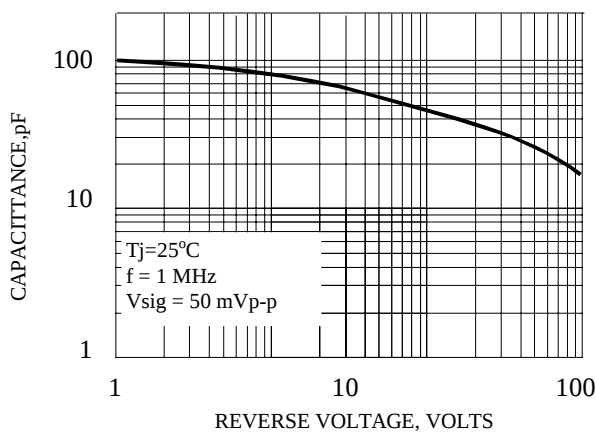


FIG. 6-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

