



**SFS2A  
THRU  
SFS2J**

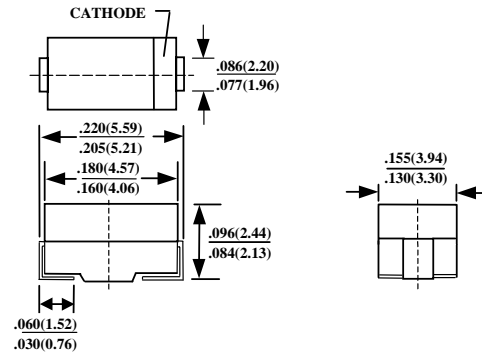
**2A SUPER FAST RECOVERY SURFACE MOUNT RECTIFIER**

**FEATURES**

- LOW PROFILE PACKAGE
- PLASTIC PACKAGE HAS UNDERWRITERS LABORATORY 94V-0
- IDEAL FOR SURFACE MOUNTED APPLICATION
- GLASS PASSIVATED CHIP JUNCTI
- BULIT-IN STRAIN RELIEF DESIGN
- SUPER FAST RECOVERY TIME FOR HIGH EFFICIENT
- HIGH TEMPERATURE SOLDERING : 250°C/10 SECONDS AT TERMINAL

**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 : 0.093 GRAMS



CASE:DO-214AA (SMB)  
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	SFS2A	SFS2B	SFS2C	SFS2D	SFS2E	SFS2G	SFS2J	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	$V_{RRM}$	50	100	150	200	300	400	600	V
MAXIMUM RMS VOLTAGE	$V_{RMS}$	35	70	105	140	210	280	420	V
MAXIMUM DC BLOCKING VOLTAGE	$V_{DC}$	50	100	1500	200	300	400	600	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT AT $T_J=90^{\circ}C$	$I_O$	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 1)	$C_J$					25			PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta JL}$					20			$^{\circ}C/W$
STORAGE TEMPERATURE RANGE	$T_{STG}$					- 55 TO + 150			$^{\circ}C$
OPERATING TEMPERATURE RANGE	$T_{OP}$					- 55 TO + 150			$^{\circ}C$

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

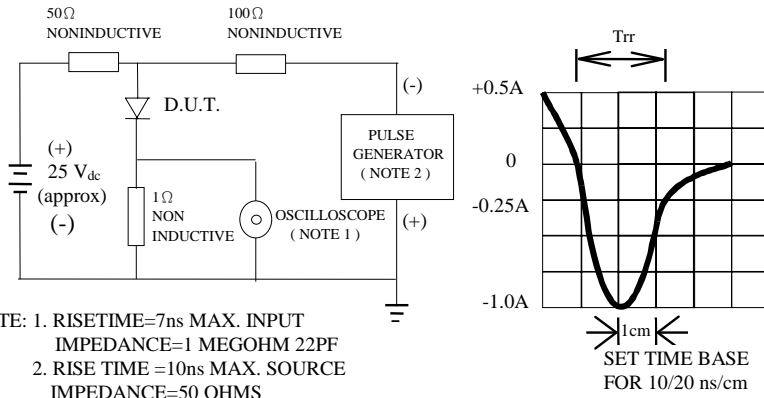
CHARACTERISTICS	SYMBOL	SFS2A	SFS2B	SFS2C	SFS2D	SFS2E	SFS2G	SFS2J	UNITS
MAXIMUM FORWARD VOLTAGE AT $I_O = 2A$	$V_F$	0.95				1.25		1.85	V
MAXIMUM REVERSE CURRENT AT 25°C	$I_R$					5			$\mu A$
MAXIMUM REVERSE CURRENT AT 100°C	$I_R$					100			$\mu A$
MAXIMUM REVERSE RECOVERY TIME (NOTE3)	$T_{RR}$					35			nS
MARKING		SF2A	SF2B	SF2C	SF2D	SF2E	SF2G	SF2J	

NOTE :

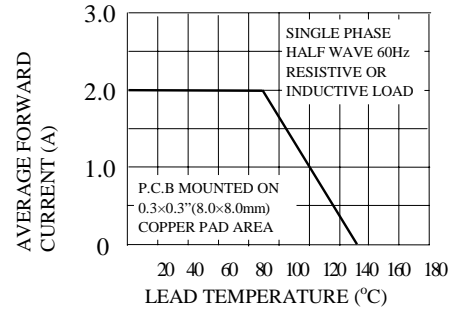
1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. THERMAL RESISTANCE FROM JUNCTION TO AMBIENT AND JUNCTION TO LEAD P.C.B. MOUNTED ON 0.3×0.3"(8.0×8.0mm) COPPER PAD AREAS
3. REVERSE RECOVERY TEST CONDITIONS:  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$

# RATINGS AND CHARACTERISTIC CURVE SFS2A THRU SFS2J

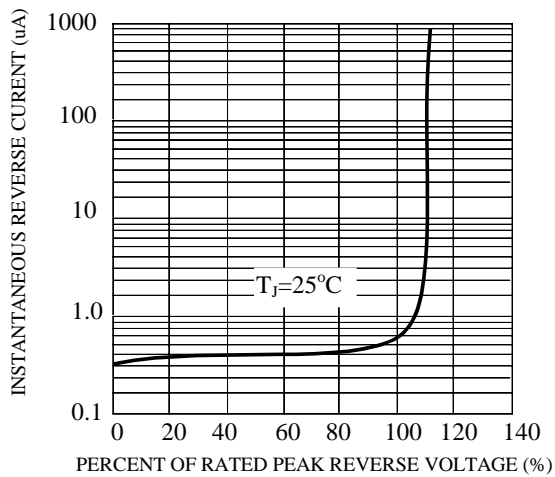
**FIG. 1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC**



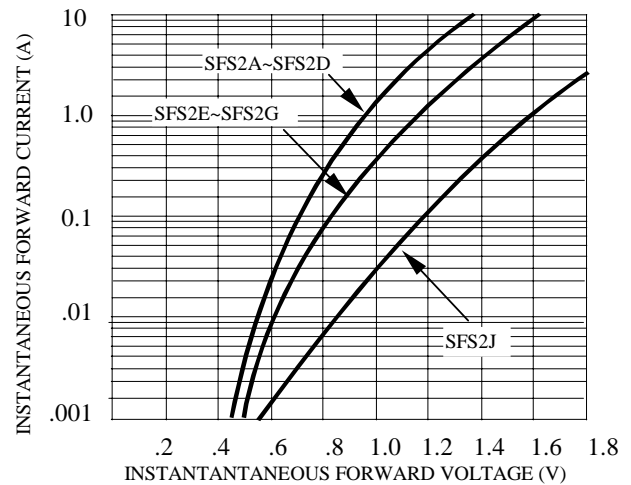
**FIG. 2-TYPICAL FORWARD CURRENT DERATING CURVE**



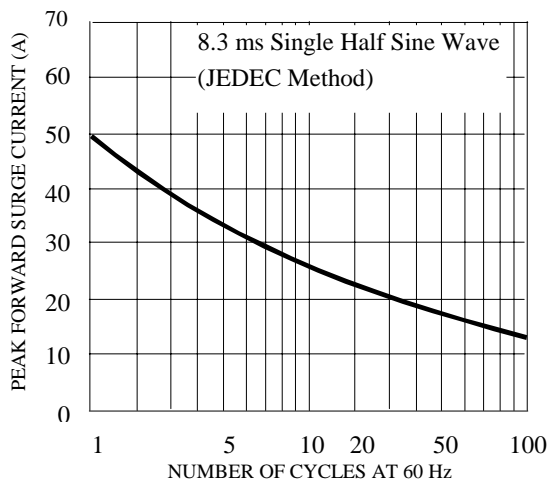
**FIG. 3-TYPICAL REVERSE CHARACTERISTICS**



**FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG. 6-TYPICAL JUNCTION CAPACITANCE**

