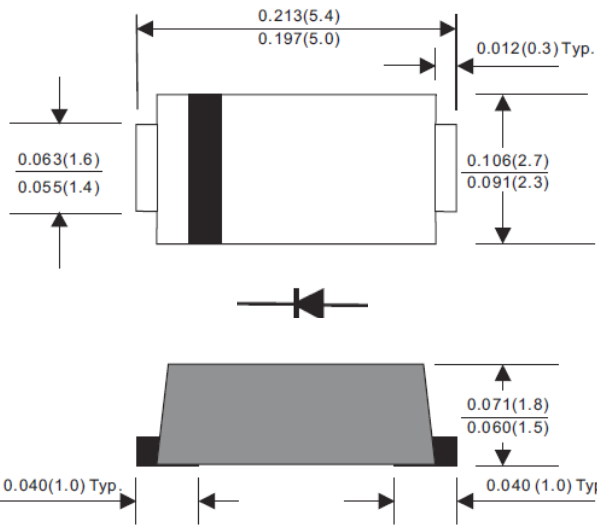


## 2A SMD FAST RECOVERY RECTIFIERS, 50V-1000V

	<h3>PRODUCT FEATURES</h3> <ol style="list-style-type: none"> <li>1. FLAMMABILITY CLASSIFICATION 94V-0</li> <li>2. EXCELLENT REVERSE LEAKAGE CURRENT AND THERMAL RESISTANCE</li> <li>3. HIGH CURRENT CAPABILITY</li> <li>4. GLASS PASSIVATED CHIP JUNCTION</li> <li>5. HIGH SPEED SWITCHING AND HIGH SURGE CAPABILITY</li> <li>6. CASE: TRANSFER MOLDED, DO-214AC (SMA-S)</li> <li>7. DIMENSIONS IN INCHES AND (MILLIMETERS)</li> <li>8. LEADS: SOLDERABILITY PER MIL-STD-750 METHOD 2026</li> <li>9. WEIGHT: 0.05 GRAMS</li> <li>10. RoHS COMPLIANT, ADD SUFFIX "H" FOR HALOGEN FREE i.e. FFM201-S-H: RoHS COMPLIANT/HALOGEN FREE</li> </ol>
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## ELECTRICAL CHARACTERISTICS

### MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED) AND ELECTRICAL CHARACTERISTICS

RATING	SYMBOL		UNITS
MAXIMUM FORWARD RECTIFIED CURRENT, SEE FIG. 2	$I_O$	2	A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	50	A
TYPICAL JUNCTION CAPACITANCE BETWEEN TERMINALS (NOTE 2)	$C_J$	40	pF
STORAGE TEMPERATURE RANGE	$T_{STG}$	- 65 TO +175	$^\circ\text{C}$
OPERATING JUNCTION TEMPERATURE RANGE	$T_J$	- 55 TO +150	$^\circ\text{C}$
MAX. DC REVERSE CURRENT AT RATED DC BLOCKING VOLTAGE $T_J = 25^\circ\text{C}$	$I_R$	5	$\mu\text{A}$
MAX. DC REVERSE CURRENT AT RATED DC BLOCKING VOLTAGE $T_J = 125^\circ\text{C}$	$I_R$	100	$\mu\text{A}$
TYPICAL FORWARD VOLTAGE AT $I_F = 2\text{A}$	$V_F$	1.3	V

PART NUMBER	MAX RECURRENT PK REVERSE VOLTAGE/DC BLOCKING $V_{RRM}/V_R$ (V)	MAX $V_{RMS}$ (V)	MAX REVERSE RECOVERY TIME, $T_{RR}$ (nS)	MARKING
FFM201-S	50	35	150	F21
FFM202-S	100	70	150	F22
FFM203-S	200	140	150	F23
FFM204-S	400	280	150	F24
FFM205-S	600	420	250	F25
FFM206-S	800	560	500	F26
FFM207-S	1000	700	500	F27

NOTE : 1.  $T_{RR}$  TEST CONDITION:  $I_F=0.5\text{A}$ ,  $I_R=1\text{A}$ ,  $I_{RR}=0.25\text{A}$ .  
 2. MOUNTED ON FR4 PCB USING RECOMMENDED LAYOUT.  
 3. CURRENT RATING IS BASED ON SINGLE PHASE, 1/2 WAVE, 60HZ, RESISTIVE, OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

## RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CHARACTERISTICS

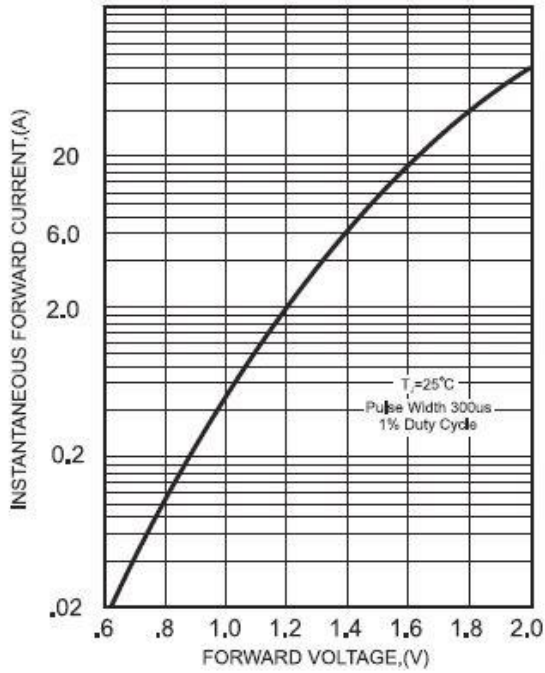


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

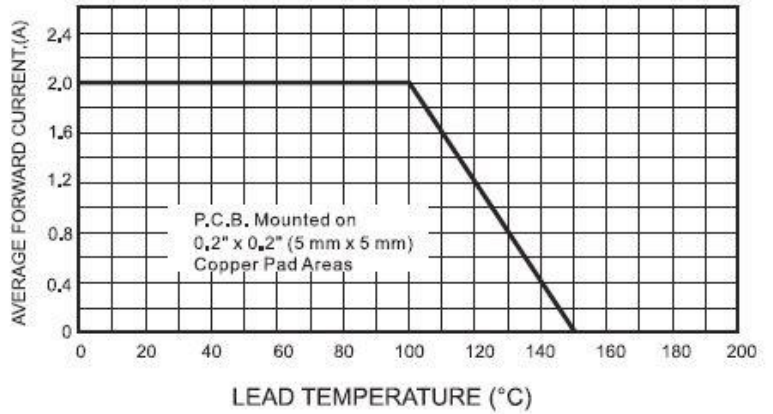


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

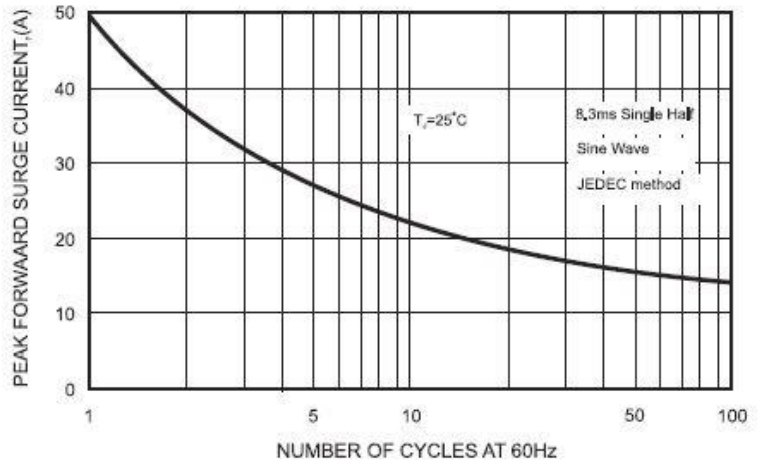
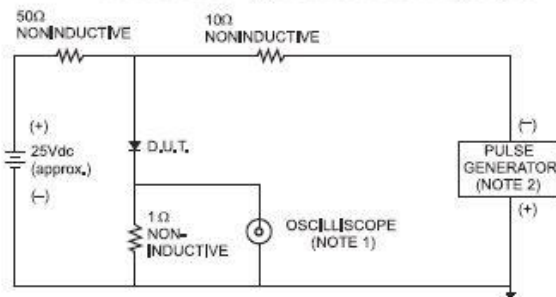


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

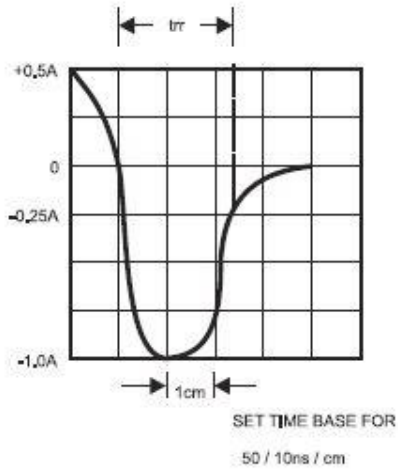
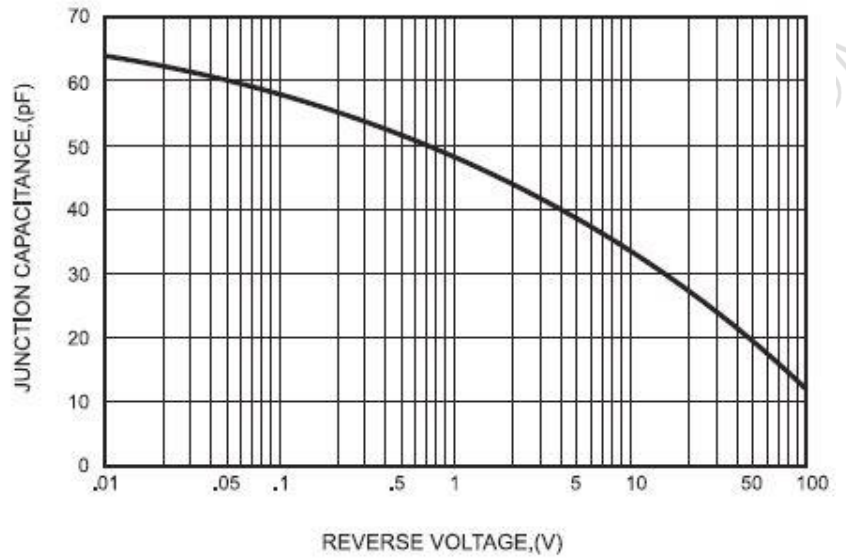
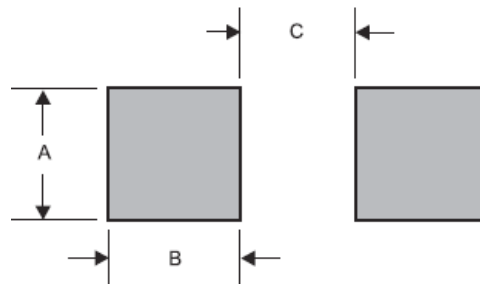


FIG.5-TYPICAL JUNCTION CAPACITANCE



## LAYOUT RECOMMENDATION



PACKAGE	A	B	C
SMA-S	0.063 (1.60)	0.059 (1.50)	0.110 (2.80)