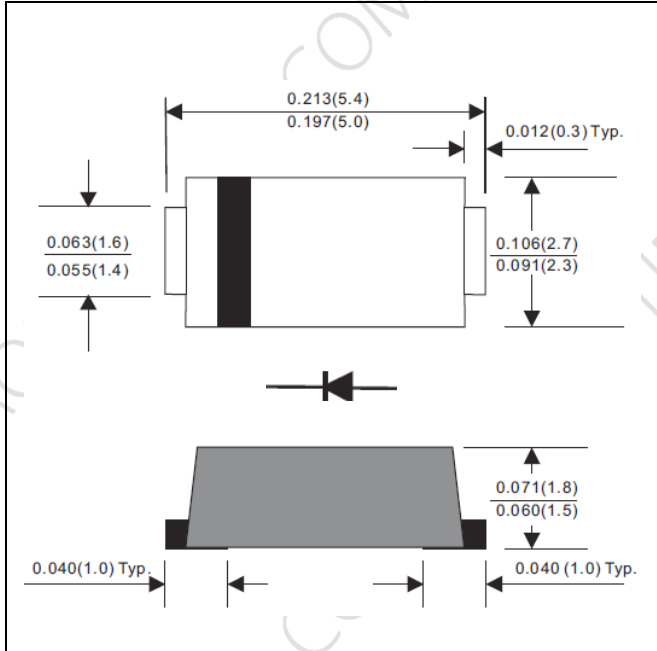


1A SMD FAST RECOVERY RECTIFIERS, 50V-1000V



PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION 94V-0
2. EXCELLENT REVERSE LEAKAGE CURRENT AND THERMAL RESISTANCE
3. HIGH CURRENT CAPABILITY
4. GLASS PASSIVATED CHIP JUNCTION
5. HIGH SPEED SWITCHING AND HIGH SURGE CAPABILITY
6. CASE: TRANSFER MOLDED, DO-214AC (SMA-S)
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. LEADS: SOLDERABILITY PER MIL-STD-750 METHOD 2026
9. WEIGHT: 0.05 GRAMS
10. RoHS COMPLIANT, ADD SUFFIX "H" FOR HALOGEN FREE
i.e. FFM101-S-H: RoHS COMPLIANT/HALOGEN FREE

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	1	A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	30	A
TYPICAL JUNCTION CAPACITANCE BETWEEN TERMINALS (NOTE 2)	C_J	15	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	μA
MAX. DC REVERSE CURRENT AT RATED DC BLOCKING VOLTAGE $T_J = 125^\circ\text{C}$	I_R	100	μA
TYPICAL THERMAL RESISTANCE	$R_{\theta JA}$	45	$^\circ\text{C/W}$
	$R_{\theta JC}$	30	$^\circ\text{C/W}$
TYPICAL FORWARD VOLTAGE AT $I_F = 1\text{A}$	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
FFM101-S	50	35	150	F11
FFM102-S	100	70	150	F12
FFM103-S	200	140	150	F13
FFM104-S	400	280	150	F14
FFM105-S	600	420	250	F15
FFM106-S	800	560	500	F16
FFM107-S	1000	700	500	F17

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

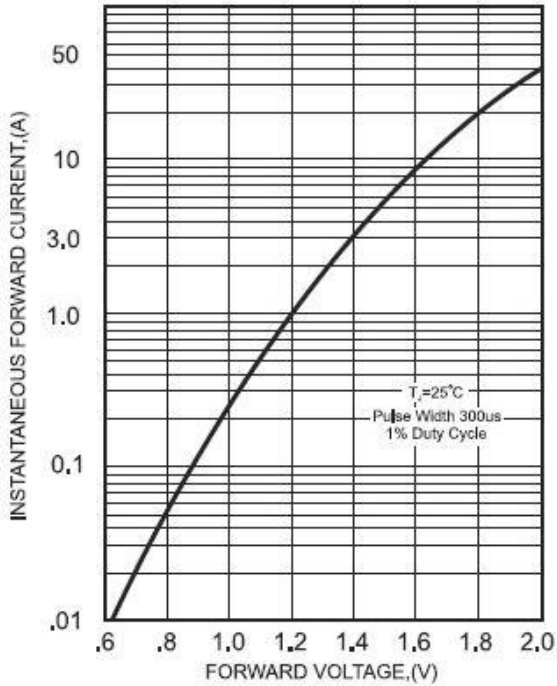


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

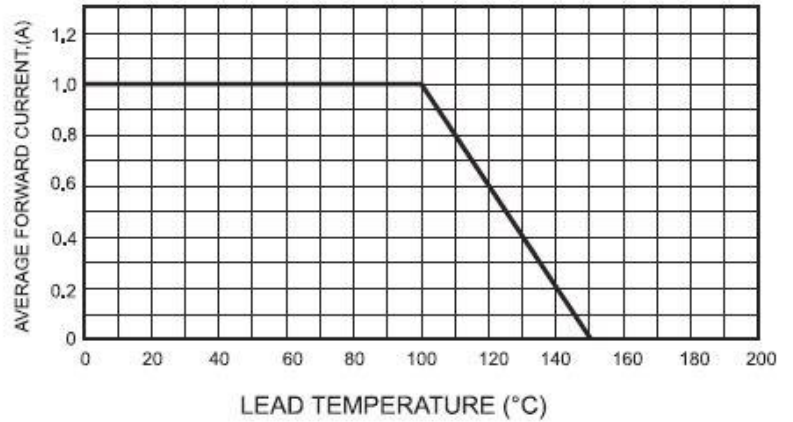


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

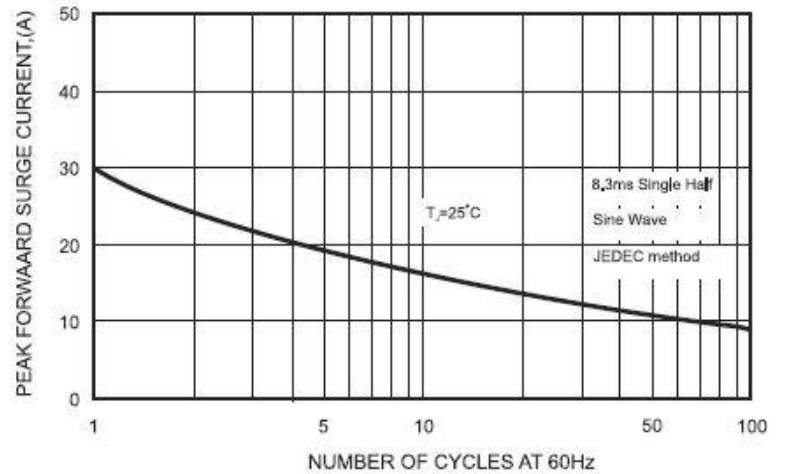
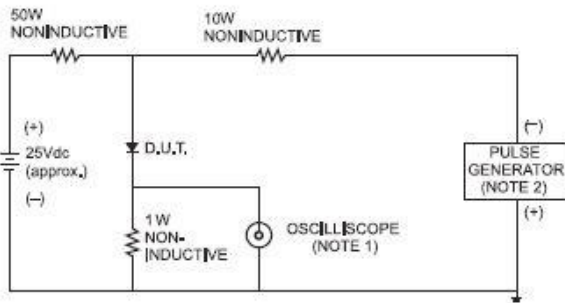


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

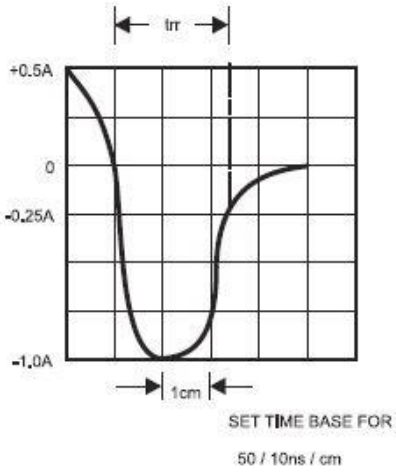
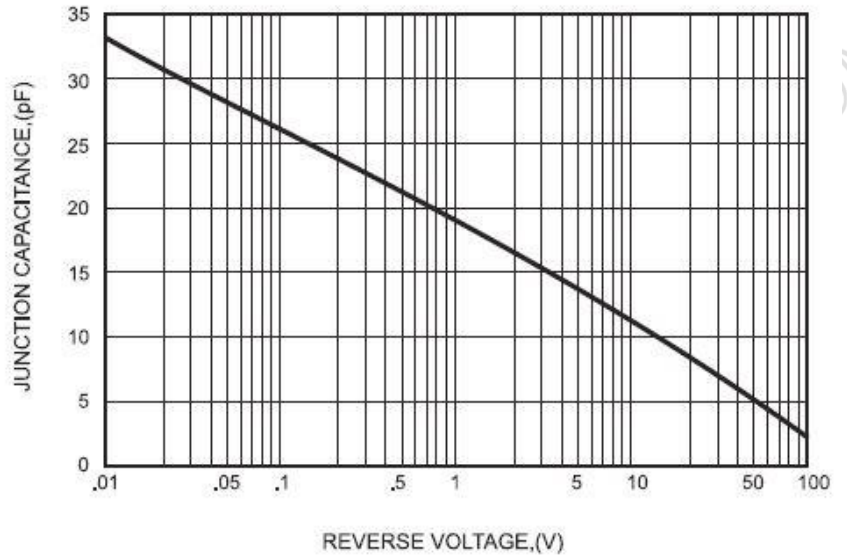
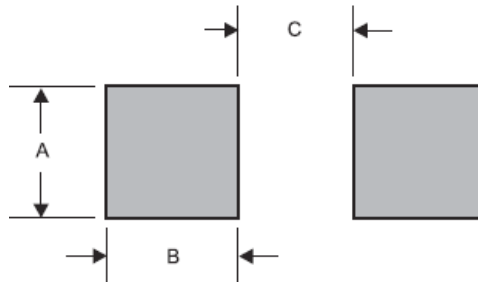


FIG.5-TYPICAL JUNCTION CAPACITANCE



LAYOUT RECOMMENDATION



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