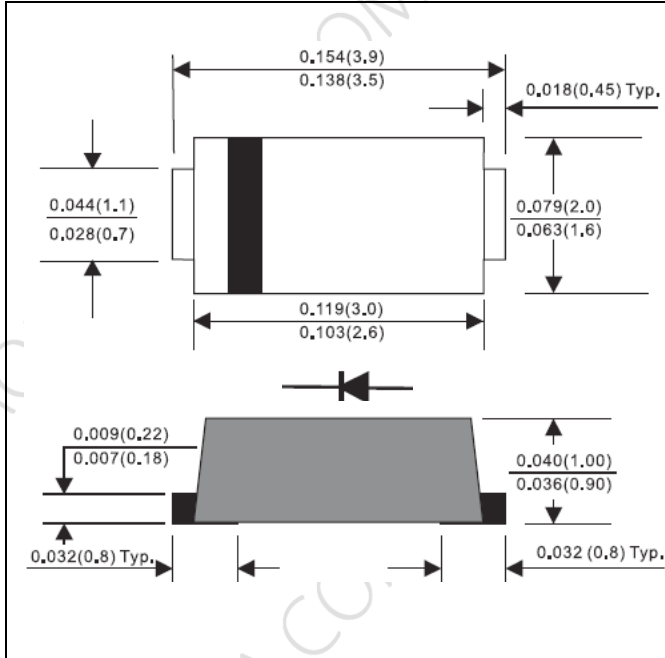


1A SMD GENERAL PURPOSE RECTIFIERS, 50V-1000V



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 SURGE CAPABILITY
6. CASE: TRANSFER MOLDED, SOD-123S (MINI SMA)
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. LEADS: SOLDERABILITY PER MIL-STD-750 METHOD 2026
9. WEIGHT: 0.0155 GRAMS
10. RoHS COMPLIANT, ADD SUFFIX "H" FOR HALOGEN FREE
i.e. FM4001-MS-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 1)	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	50	μA
TYPICAL THERMAL RESISTANCE	$R_{\theta JA}$	58	$^\circ\text{C/W}$
	$R_{\theta JC}$	28	$^\circ\text{C/W}$
TYPICAL FORWARD VOLTAGE AT $I_F = 1\text{A}$	V_F	1.1	V

PART NUMBER	MAX RECURRENT PK REVERSE VOLTAGE/DC BLOCKING V_{RRM}/V_R (V)	MAX V_{RMS} (V)	MARKING
FM4001-MS	50	35	A1
FM4002-MS	100	70	A2
FM4003-MS	200	140	A3
FM4004-MS	400	280	A4
FM4005-MS	600	420	A5
FM4006-MS	800	560	A6
FM4007-MS	1000	700	A7

NOTE : 1. MEASURE AT 1MHz WITH 4VDC REVERSE VOLTAGE APPLIED .
2. 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

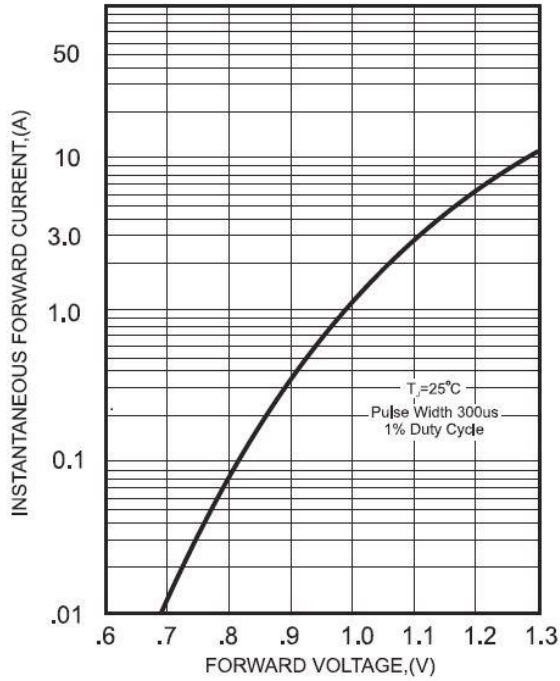


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

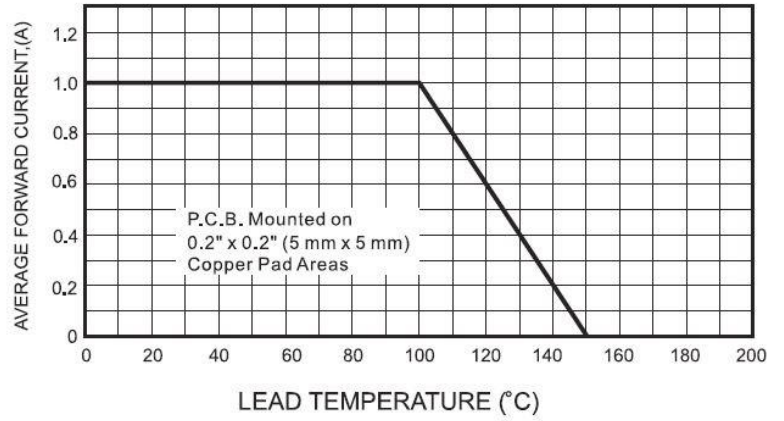


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

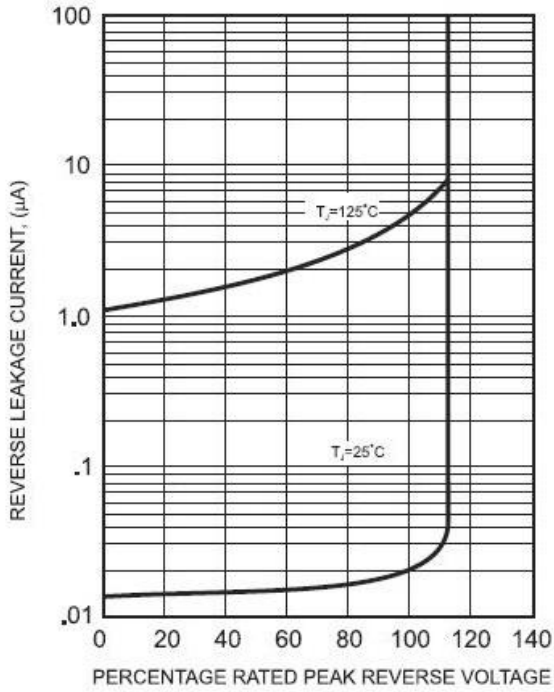


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

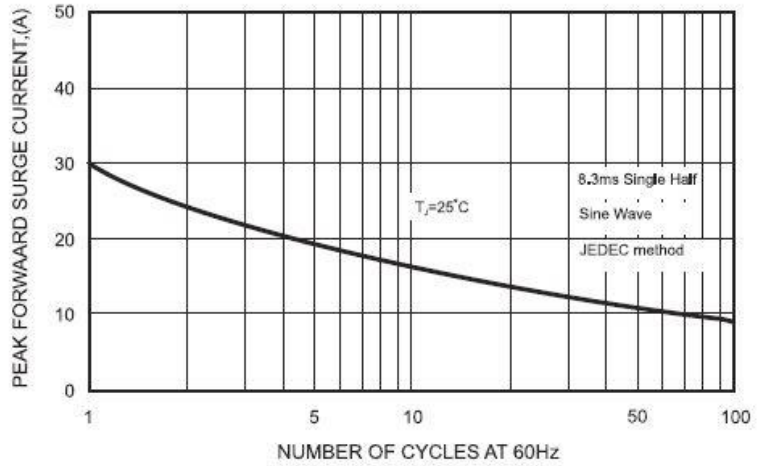
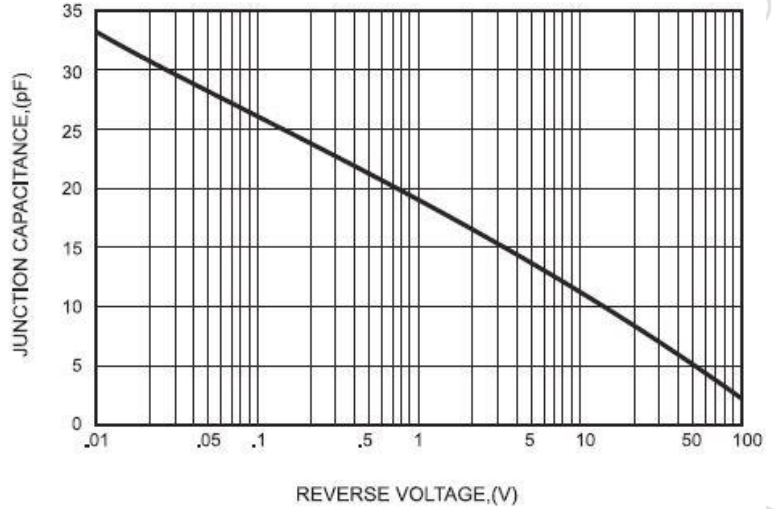
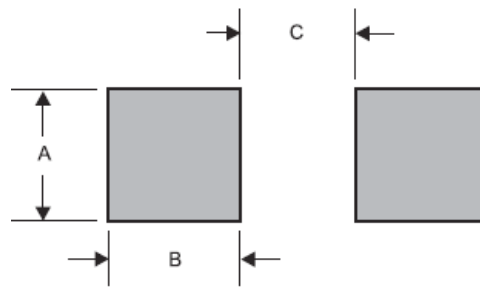


FIG.5-TYPICAL JUNCTION CAPACITANCE



LAYOUT RECOMMENDATION



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