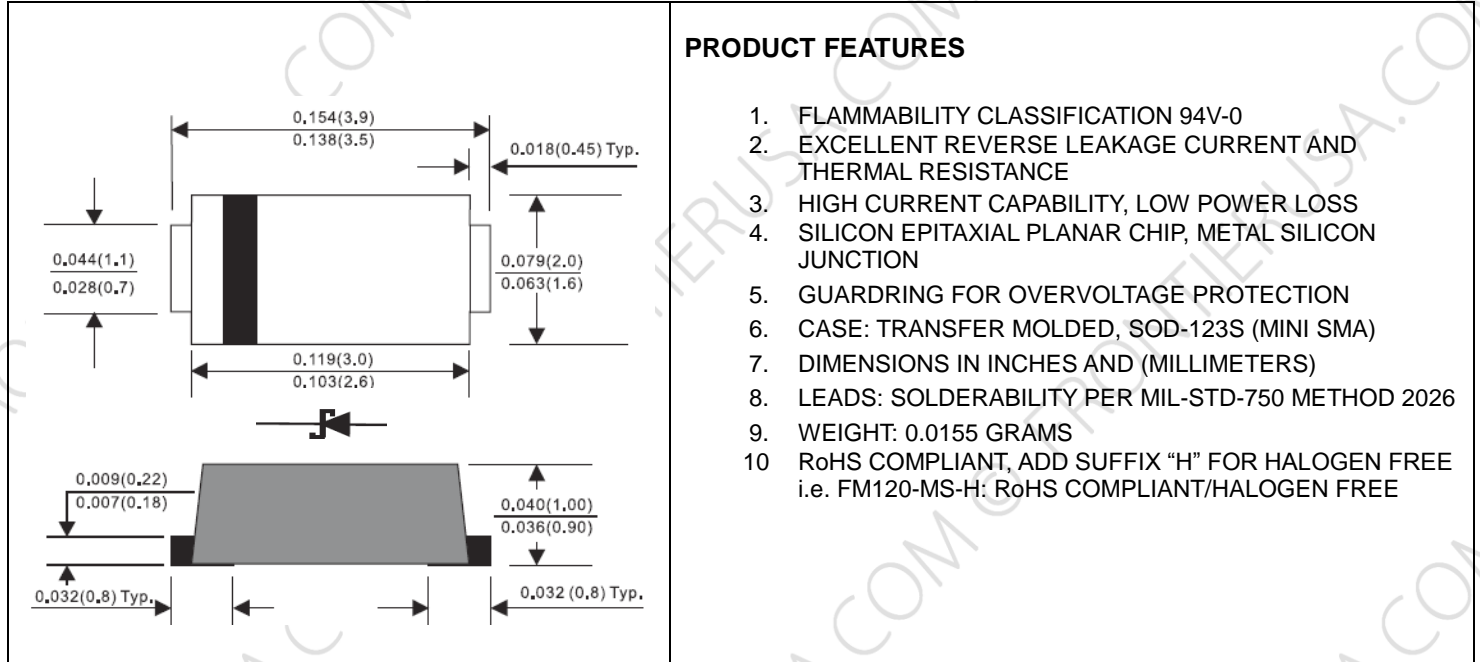


1A SMD SCHOTTKY BARRIER RECTIFIERS, 20V-200V



ELECTRICAL CHARACTERISTICS

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

RATING	SYMBOL		UNITS
MAXIMUM FORWARD RECTIFIED CURRENT	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	120	pF
STORAGE TEMPERATURE RANGE	T_{STG}	- 65 TO +175	$^\circ\text{C}$
OPERATING JUNCTION TEMPERATURE RANGE (NOTE 2)	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	0.5	mA
MAX. DC REVERSE CURRENT AT RATED DC BLOCKING VOLTAGE $T_J = 100^\circ\text{C}$	I_R	10	mA
TYPICAL THERMAL RESISTANCE	$R_{\theta JA}$	84	$^\circ\text{C}/\text{W}$
	$R_{\theta JC}$	42	$^\circ\text{C}/\text{W}$

PART NUMBER	MAX RECURRENT PK REVERSE VOLTAGE/DC BLOCKING V_{RRM}/V_R (V)	MAX V_{RMS} (V)	TYPICAL FORWARD VOLTAGE AT $I_F = 1\text{A}$ V_F (V)	MARKING
FM120-MS	20	14	0.50	12
FM130-MS	30	21	0.50	13
FM140-MS	40	28	0.50	14
FM150-MS	50	35	0.70	15
FM160-MS	60	42	0.70	16
FM180-MS	80	56	0.85	18
FM1100-MS	100	70	0.85	10
FM1150-MS	150	105	0.90	115
FM1200-MS	200	140	0.92	120

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

2. FOR THE FM120-MS, FM130-MS, AND FM140-MS, THE OPERATING JUNCTION TEMPERATURE RANGE IS FROM -55 TO +125 $^\circ\text{C}$



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 CURRENT DERATING CURVE

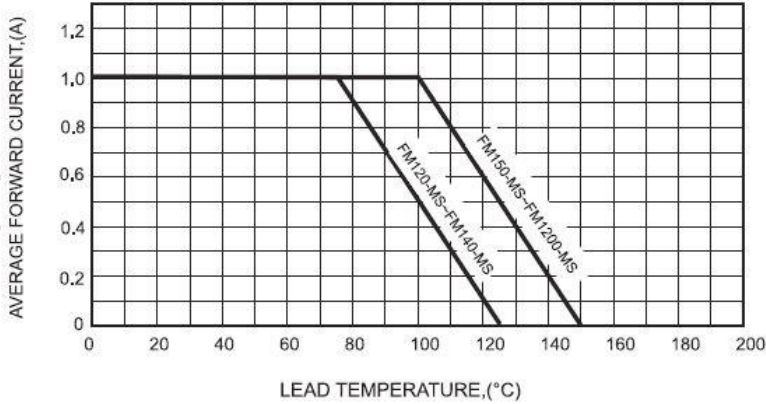


FIG.2-TYPICAL FORWARD CHARACTERISTICS

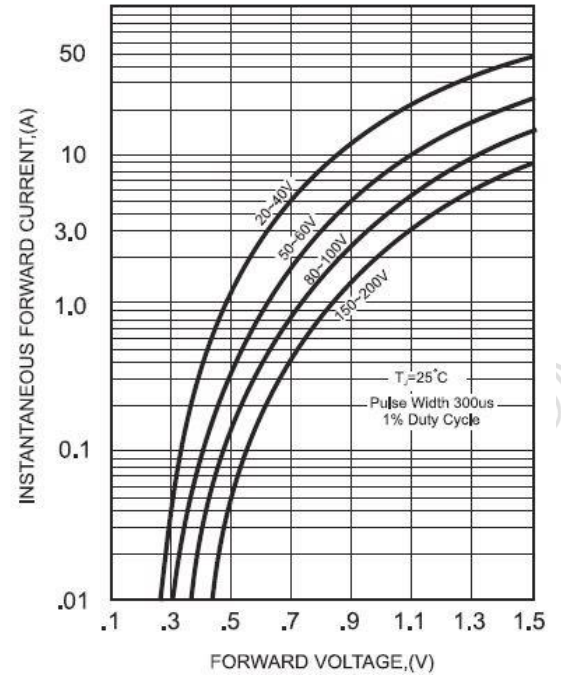


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

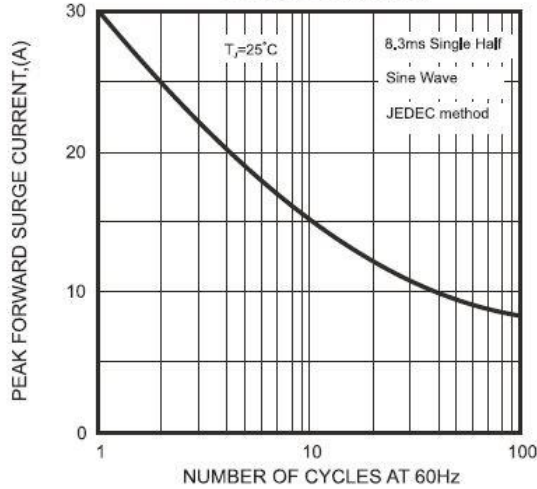


FIG.4-TYPICAL JUNCTION CAPACITANCE

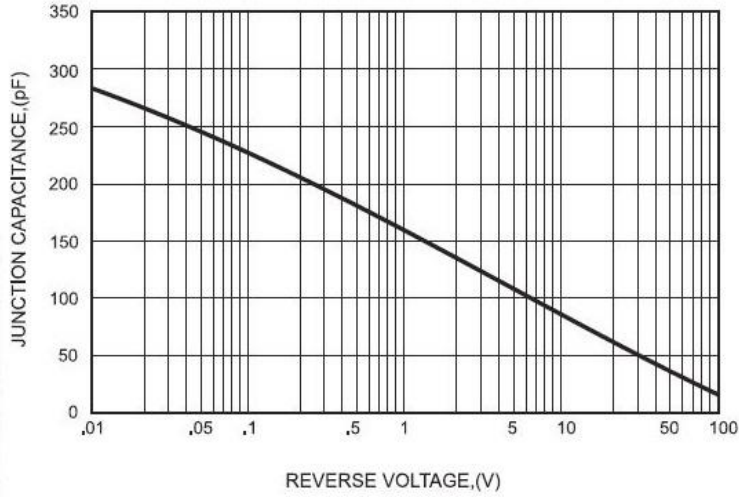
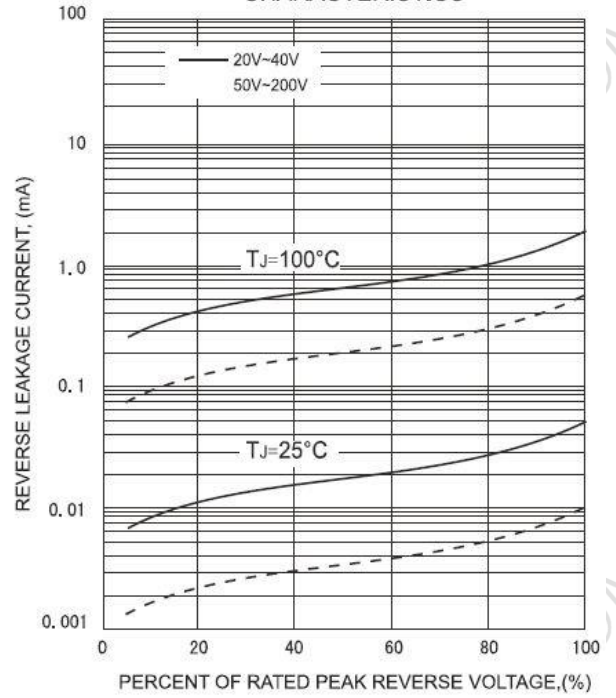
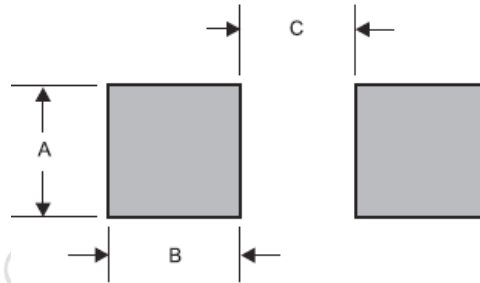


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



LAYOUT RECOMMENDATION



PACKAGE	A	B	C
SOD-123S	0.044 (1.10)	0.040 (1.00)	0.079 (2.00)