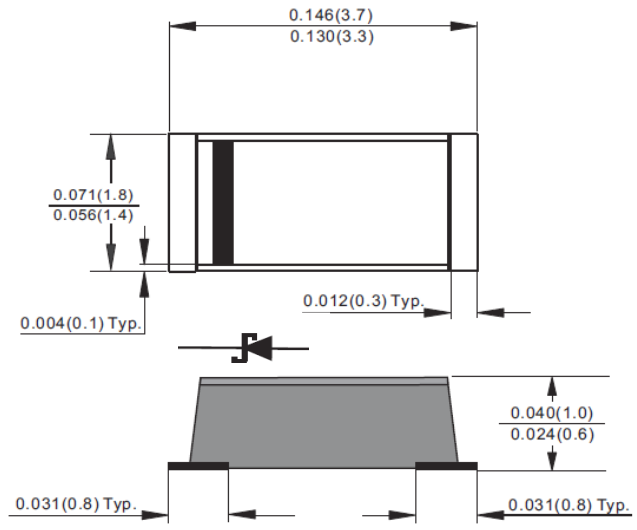
1A SMD SCHOTTKY BARRIER RECTIFIERS, 40V-200V



PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION 94V-0
2. EXCELLENT REVERSE LEAKAGE CURRENT AND THERMAL RESISTANCE
3. HIGH CURRENT CAPABILITY, LOW POWER LOSS
4. SILICON EPITAXIAL PLANAR CHIP, METAL SILICON JUNCTION
5. GUARDRING FOR OVERVOLTAGE PROTECTION
6. CASE: TRANSFER MOLDED, SOD-123H1
7. DIMENSIONS IN INCHES AND (MILLIMETERS)
8. LEADS: SOLDERABILITY PER MIL-STD-750 METHOD 2026
9. WEIGHT: 0.0103 GRAMS
10. RoHS COMPLIANT, ADD SUFFIX “H” FOR HALOGEN FREE i.e. FM140-MH1-H: RoHS COMPLIANT/HALOGEN FREE

ELECTRICAL CHARACTERISTICS

MAXIMUM RATINGS (T_A =25°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}	- 55 TO +150	°C
OPERATING JUNCTION TEMPERATURE RANGE (NOTE 2)	T_J	- 55 TO +150	°C
MAX. DC REVERSE CURRENT AT RATED DC BLOCKING VOLTAGE T_J= 25°C	I_R	0.5	mA
MAX. DC REVERSE CURRENT AT RATED DC BLOCKING VOLTAGE T_J= 125°C	I_R	10	mA
TYPICAL THERMAL RESISTANCE	$R_{\theta JA}$	80	°C/W
	$R_{\theta JC}$	40	°C/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 = 1A V_F (V)	MARKING
FM140-MH1	40	28	0.50	14
FM160-MH1	60	42	0.70	16
FM1100-MH1	100	70	0.85	10
FM1150-MH1	150	105	0.90	115
FM1200-MH1	200	140	0.92	120

NOTE : 1. MEASURE AT 1MHz WITH 4VDC REVERSE VOLTAGE APPLIED .
2. THE FM140-MH1 OPERATING JUNCTION TEMPERATURE RANGE IS FROM -55 TO +125°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

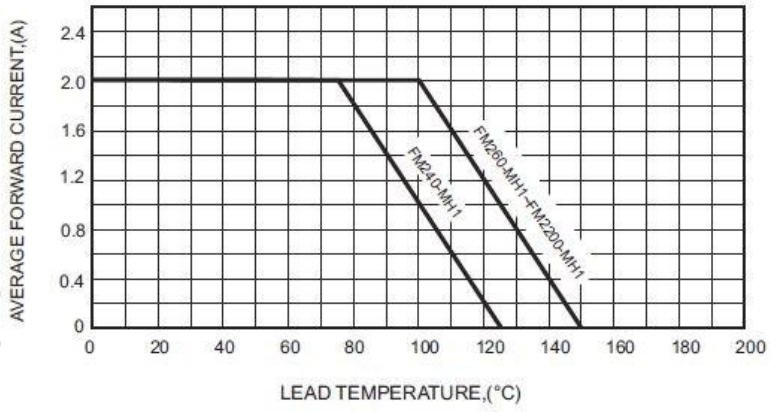


FIG.2-TYPICAL FORWARD CHARACTERISTICS

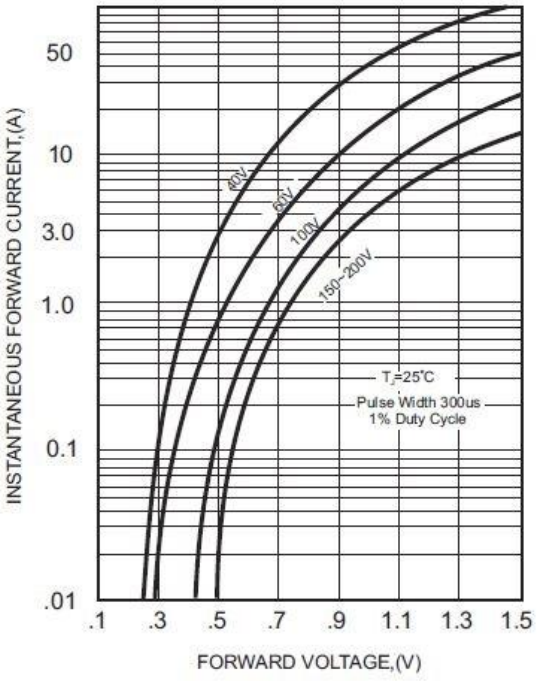


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

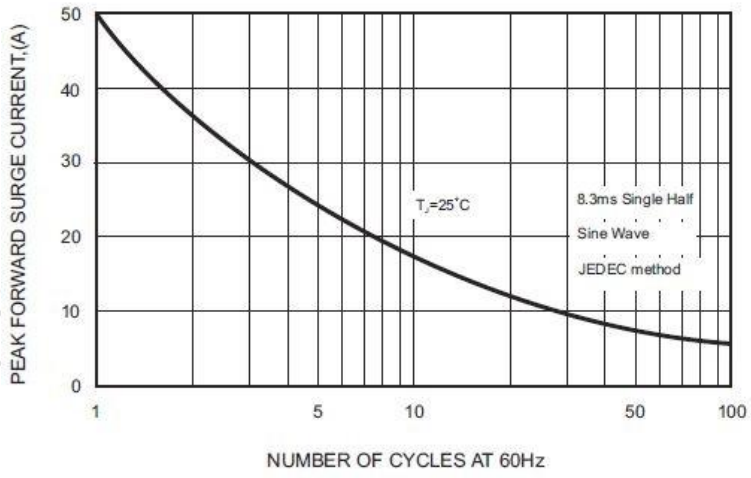


FIG.4-TYPICAL JUNCTION CAPACITANCE

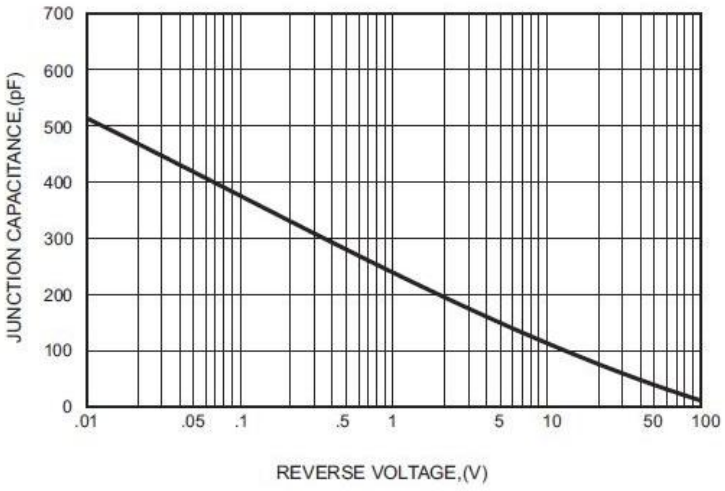
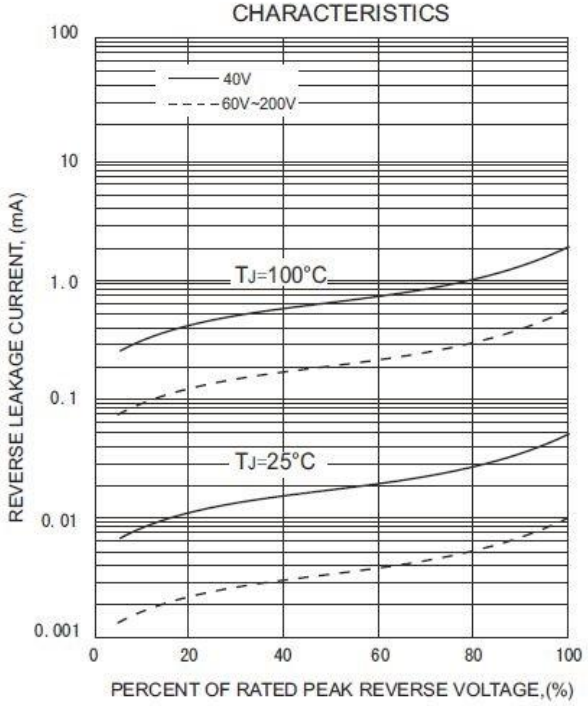
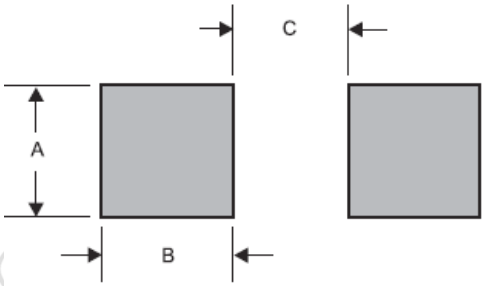


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



LAYOUT RECOMMENDATION



PACKAGE	A	B	C
SOD-123H1	0.071 (1.80)	0.051 (1.30)	0.067 (1.70)