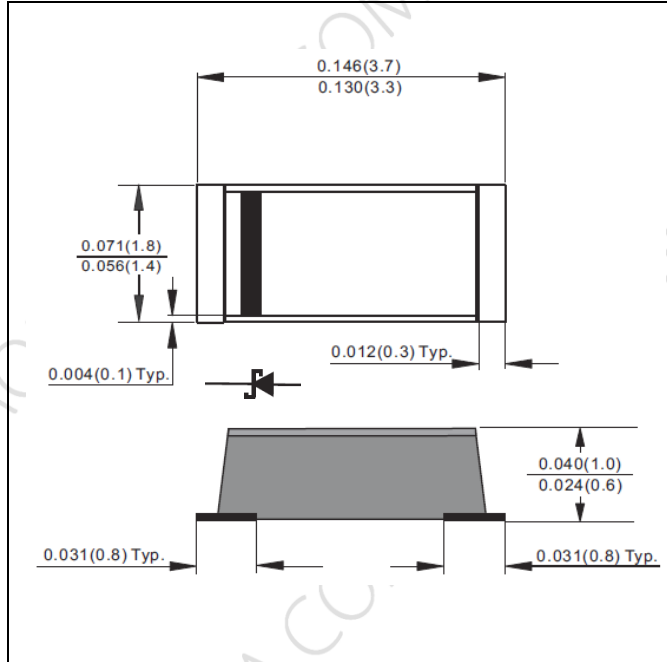


## 2A SMD SCHOTTKY BARRIER RECTIFIERS, 40V-200V



### 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. FM240-MH1-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	$I_o$	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 1)	$C_J$	160	pF
STORAGE TEMPERATURE RANGE	$T_{STG}$	- 55 TO +150	$^\circ\text{C}$
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 $T_J = 125^\circ\text{C}$	$I_R$	10	mA
TYPICAL THERMAL RESISTANCE	$R_{\theta JA}$	76	$^\circ\text{C/W}$
	$R_{\theta JC}$	38	$^\circ\text{C/W}$

PART NUMBER	MAX RECURRENT PK REVERSE VOLTAGE/DC BLOCKING $V_{RRM}/V_R$ (V)	MAX $V_{RMS}$ (V)	TYPICAL FORWARD VOLTAGE AT $I_F = 2A$ $V_F$ (V)	MARKING
FM240-MH1	40	28	0.50	24
FM260-MH1	60	42	0.70	26
FM2100-MH1	100	70	0.85	20
FM2150-MH1	150	105	0.90	215
FM2200-MH1	200	140	0.92	220

- NOTE :
1. MEASURE AT 1MHz WITH 4VDC REVERSE VOLTAGE APPLIED .
  2. THE FM240-MH1 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

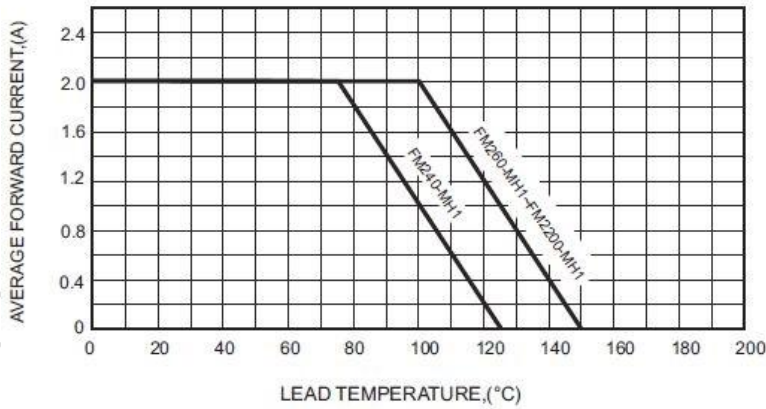


FIG.2-TYPICAL FORWARD CHARACTERISTICS

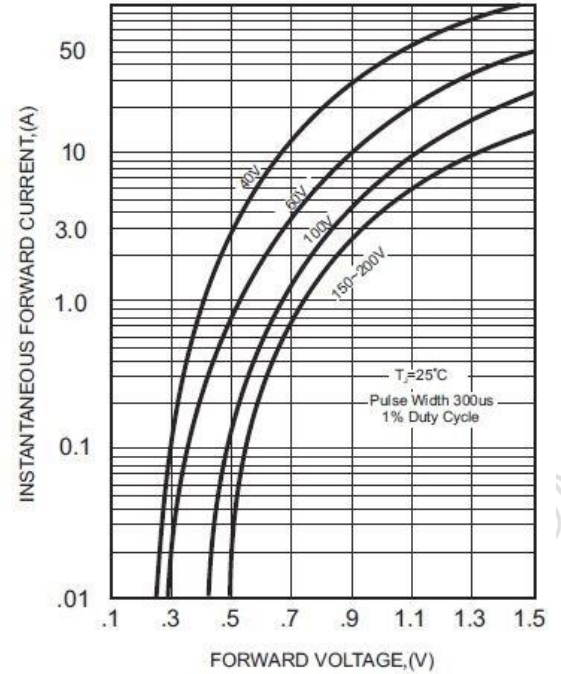


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

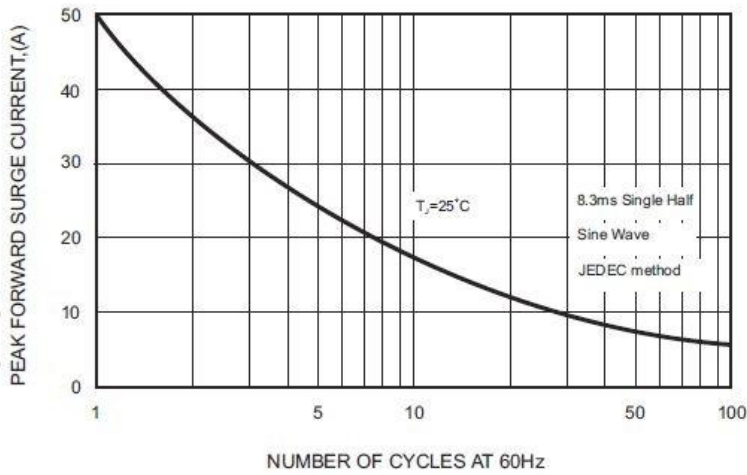


FIG.4-TYPICAL JUNCTION CAPACITANCE

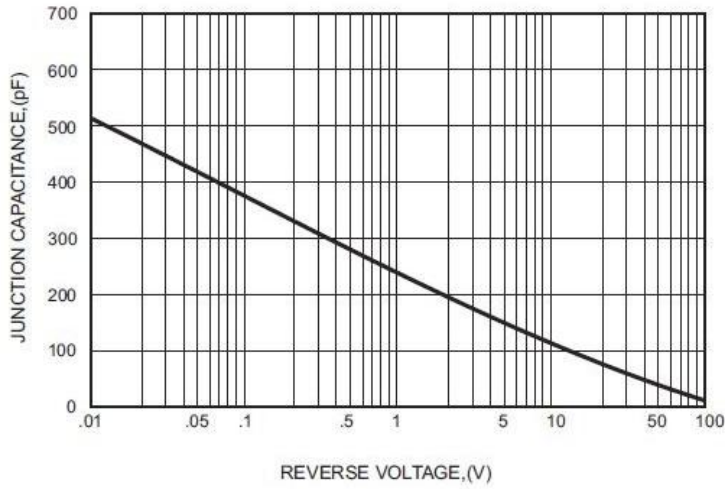
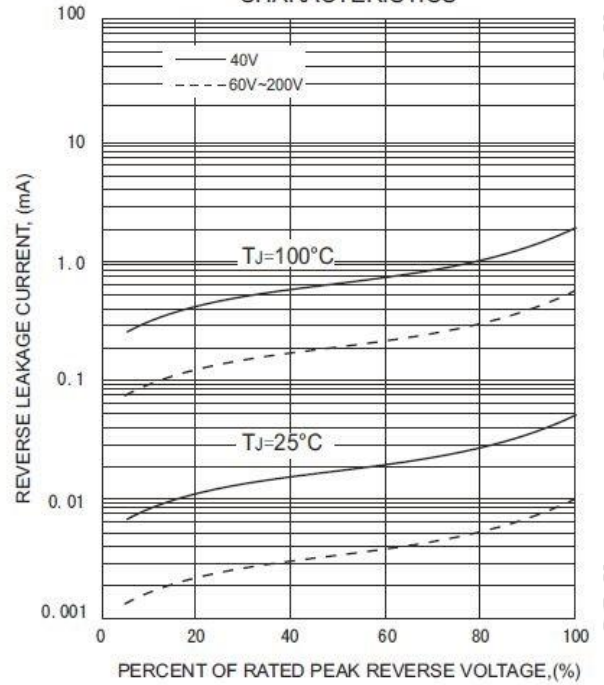
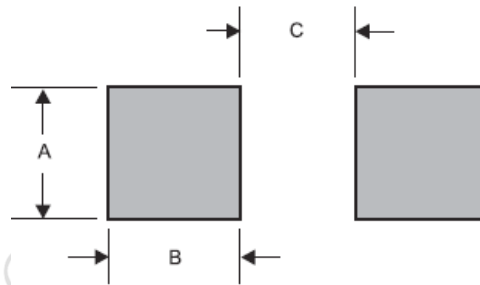


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



## LAYOUT RECOMMENDATION



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