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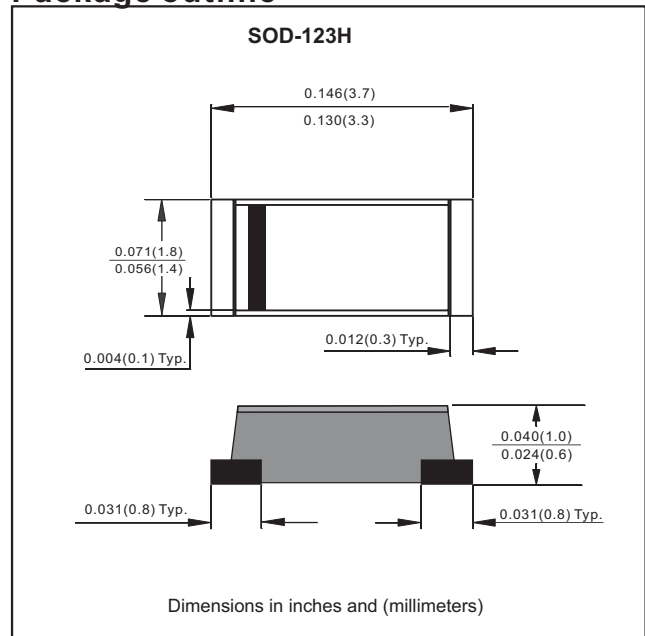
Features

- Batch process design, excellent power dissipation offers better reverse leakage current and thermal resistance.
- Low profile surface mounted application in order to optimize board space.
- Tiny plastic SMD package.
- High current capability.
- High surge capability.
- Glass passivated chip junction.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228
- **Moisture Sensitivity Level 1**

Mechanical data

- Epoxy : UL94-V0 rated flame retardant
- Case : Molded plastic, SOD-123H
- Terminals :Plated terminals, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any

Package outline



Maximum ratings and Electrical Characteristics (AT T_A=25°C unless otherwise noted)

PARAMETER	SYMBOLS	FM4001-MH	FM4002-MH	FM4003-MH	FM4004-MH	FM4005-T P	FM4006-MH	FM4007-MH	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I _O	1.0							A
Peak forward surge current 8.3ms single half sine-wave(JEDEC method)	I _{FSM}	25							A
Maximum forward voltage at I _F =1.0A	V _F	1.10							V
Maximum DC reverse current T _J =25°C at rated DC blocking voltage T _J =125°C	I _R	5.0 50							uA uA
Typical thermal resistance	R _{θJA} R _{θJC}	56 26							°C/W
Typical junction capacitance (Note 1)	C _J	15							pF
Operating junction temperature range	T _J	-55 to +150							°C
Storage temperature range	T _{STG}	-55 to +150							°C

Note 1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC



0A Si fZUY Mci bh; YbYfU Di fdcgY RYWjZYfg-) 0-%00\$V
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Rating and characteristic curves (FM4001-MH THRU FM4007-MH)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

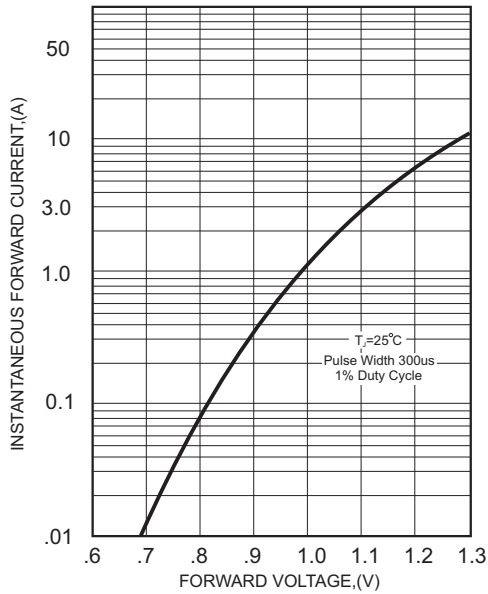


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

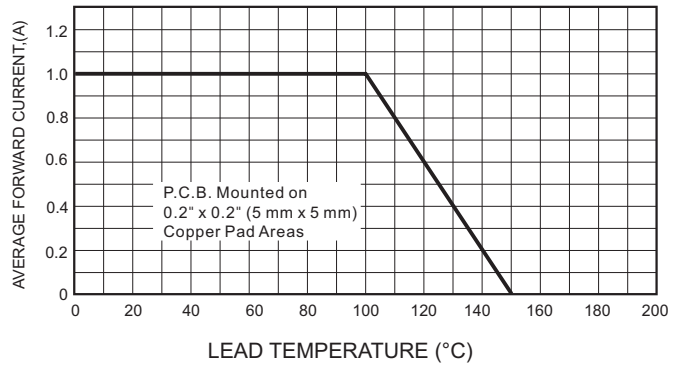


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

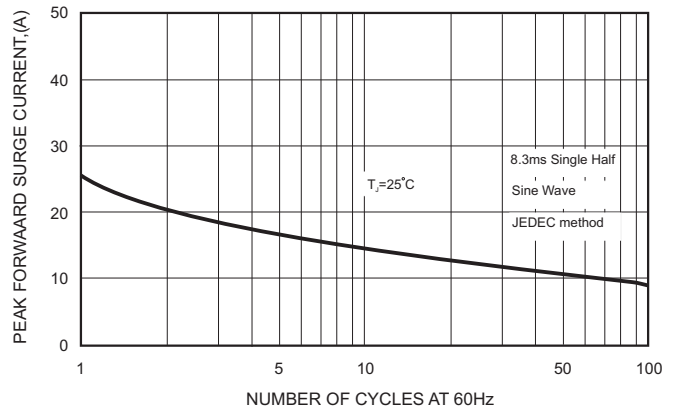


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

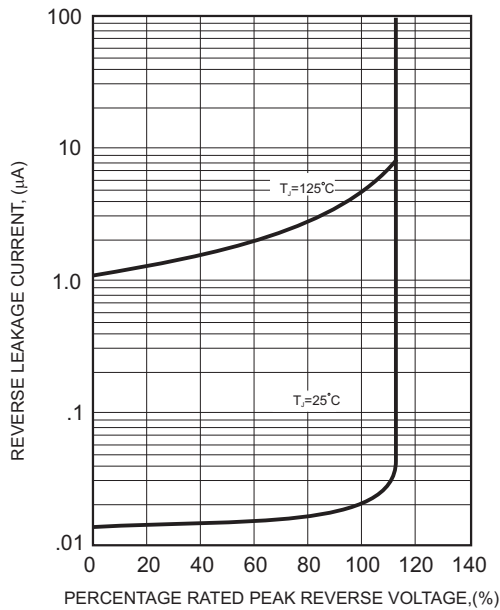
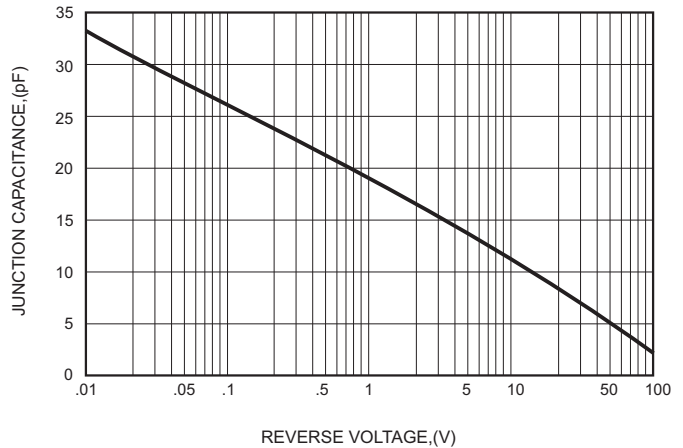




FIG.5-TYPICAL JUNCTION CAPACITANCE



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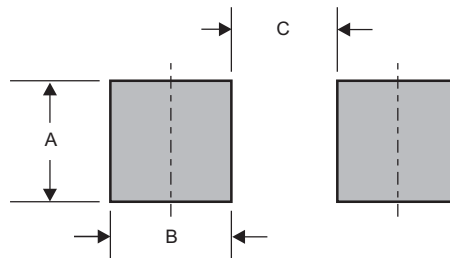
Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

Marking

Type number	Marking code
FM4001-MH	A1
FM4002-MH	A2
FM4003-MH	A3
FM4004-MH	A4
FM4005-MH	A5
FM4006-MH	A6
FM4007-MH	A7

Suggested solder pad layout



Dimensions in inches and (millimeters)

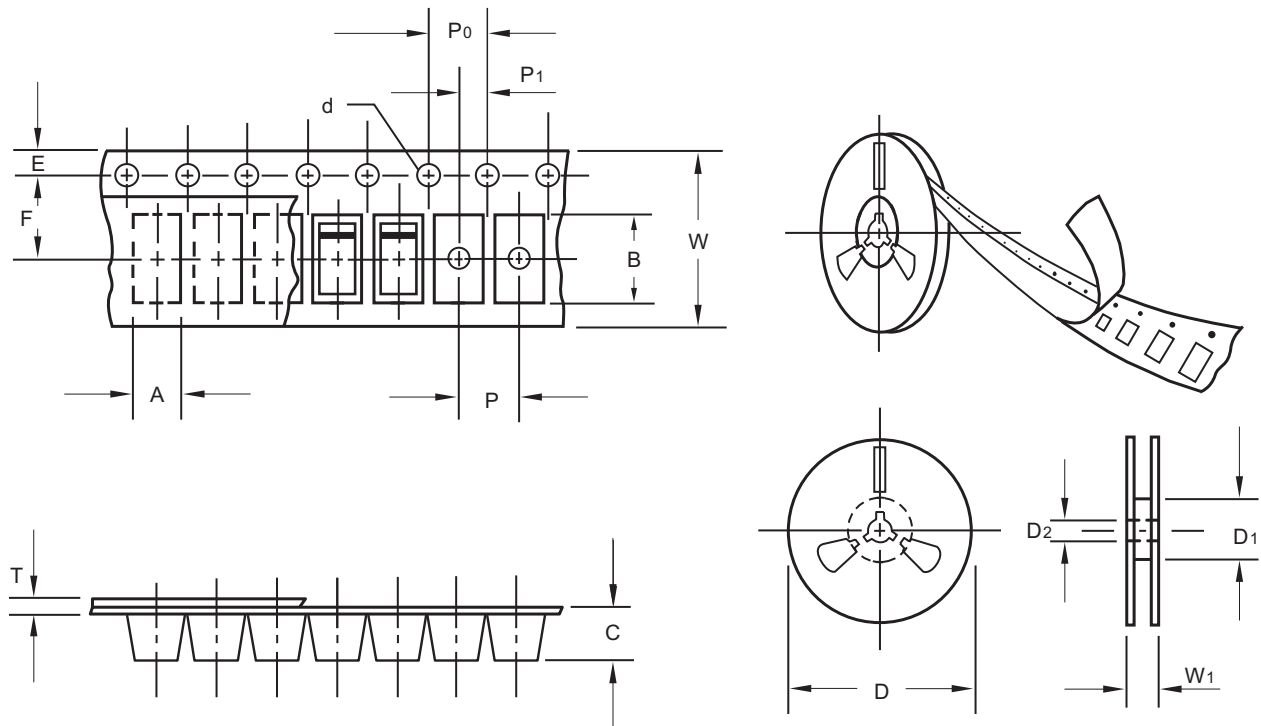
PACKAGE	A	B	C
SOD-123H	0.071 (1.80)	0.051 (1.30)	0.067 (1.70)

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Reel packing

PACKAGE	REEL SIZE	REEL (pcs)	COMPONENT SPACING (m/m)	BOX (pcs)	INNER BOX (m/m)	REEL DIA, (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
SOD-123H	7"	3,000	4.0	30,000	183*183*123	178	382*262*387	240,000	8.5

Packing information



unit:mm

Item	Symbol	Tolerance	SOD-123H
Carrier width	A	0.1	2.00
Carrier length	B	0.1	3.85
Carrier depth	C	0.1	1.10
Sprocket hole	d	0.1	1.50
13" Reel outside diameter	D	2.0	-
13" Reel inner diameter	D1	min	-
7" Reel outside diameter	D	2.0	178.00
7" Reel inner diameter	D1	min	62.00
Feed hole diameter	D2	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	3.50
Punch hole pitch	P	0.1	4.00
Sprocket hole pitch	P0	0.1	4.00
Embossment center	P1	0.1	2.00
Overall tape thickness	T	0.1	0.23
Tape width	W	0.3	8.00
Reel width	W1	1.0	11.40

Note: Devices are packed in accordance with EIA standard RS-481-A and specifications listed above.

0A Si fZUY Mci bh; YbYfU Di fdcgY RYWjZyf(-) 0-00\$V
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Device PN	Packing
Part Number -T ⁽¹⁾ H ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) H is RoHS and Haloge free product for packing code suffix "H"

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