

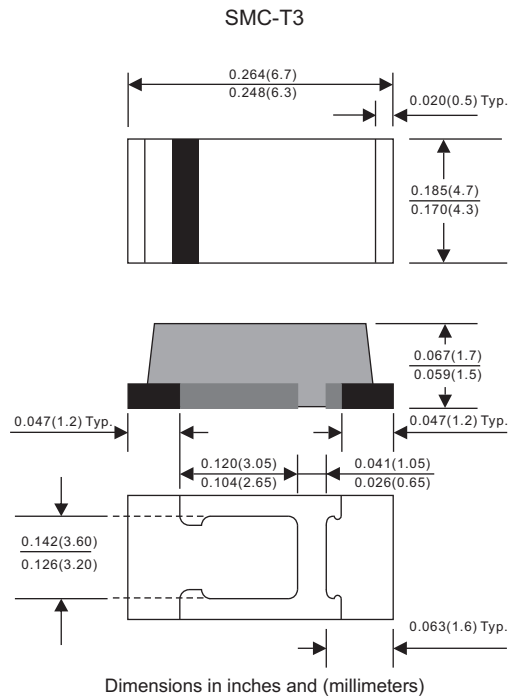
Features

- 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.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guardring for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon 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, SMC-T3
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any
- Weight : Approximated 0.1443gram

Package outline



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

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	I _O			10.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I _{FSM}			150	A
Reverse current	V _R = V _{RRM} T _J = 25°C	I _R			0.5	mA
	V _R = V _{RRM} T _J = 100°C				50	
Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C _J		700		pF
Storage temperature		T _{STG}	-11		+150	°C

SYMBOLS	V _{RRM} ^{*1} (V)	V _{RMS} ^{*2} (V)	V _R ^{*3} (V)	V _F ^{*4} (V)	Operating temperature T _J , (°C)
FM1040-T3	40	28	40	0.55	-55 to +125
FM1060-T3	60	42	60	0.70	-55 to +150
FM10100-T3	100	70	100	0.85	
FM10150-T3	150	105	150	0.90	
FM10200-T3	200	140	200	0.92	

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage@I_F=10.0A



Rating and characteristic curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

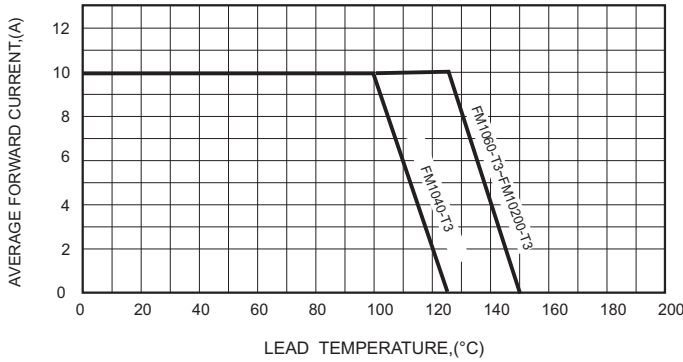


FIG.2-TYPICAL FORWARD CHARACTERISTICS

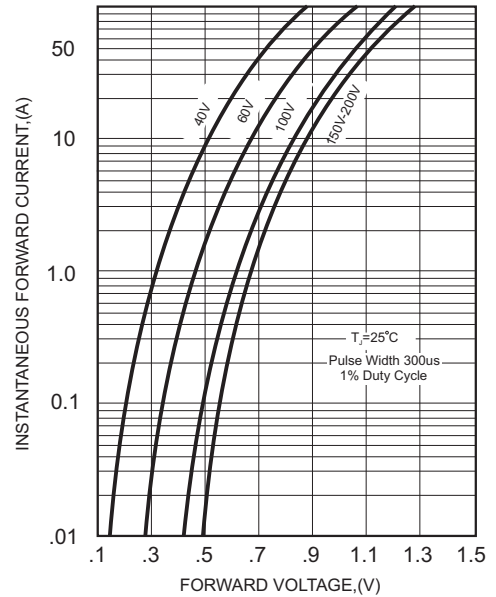


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

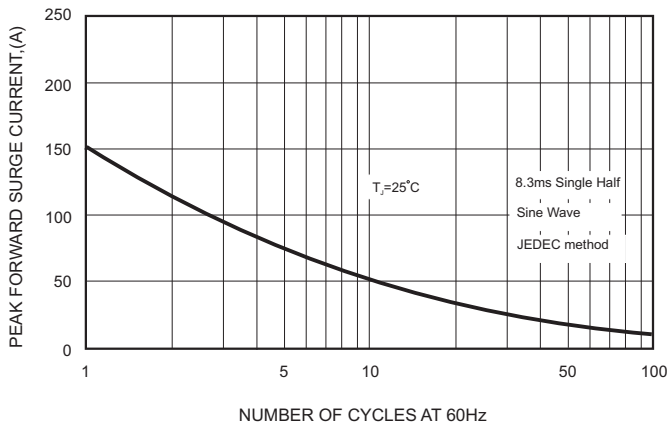


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

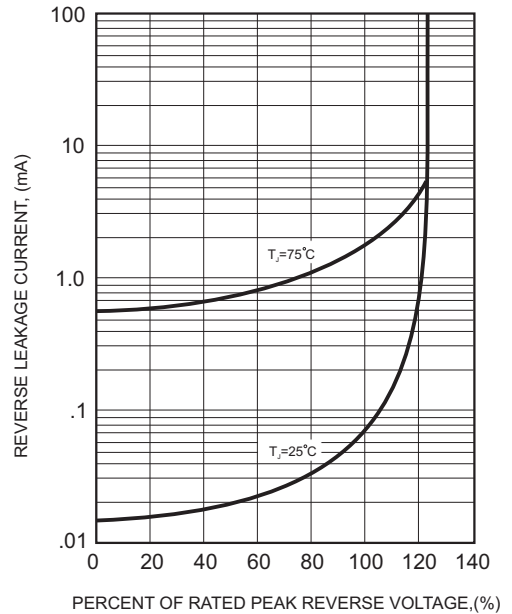
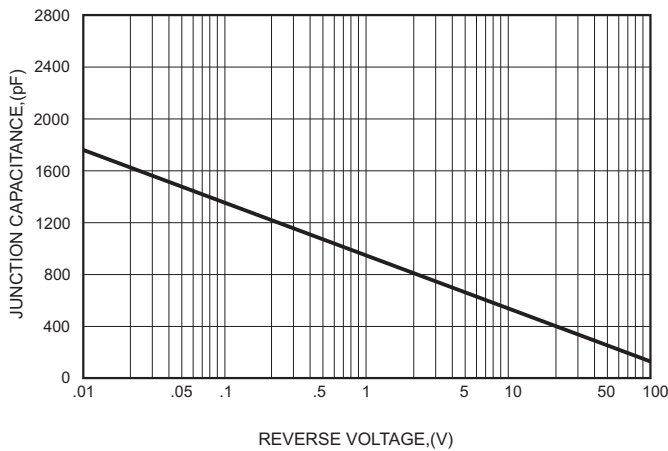


FIG.4-TYPICAL JUNCTION CAPACITANCE





Pinning information

Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

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)
SMC-T3	13"	3,000	8.0	6,000	337*337*37	330	350*330*360	48,000	17.2

Marking

Type number	Marking code
FM1040-T3-TH	SS104
FM1060-T3-TH	SS106
FM10100-T3-TH	SS110
FM10150-T3-TH	S1015
FM10200-T3-TH	S1020

Note: T3: Package code, SMC-T3

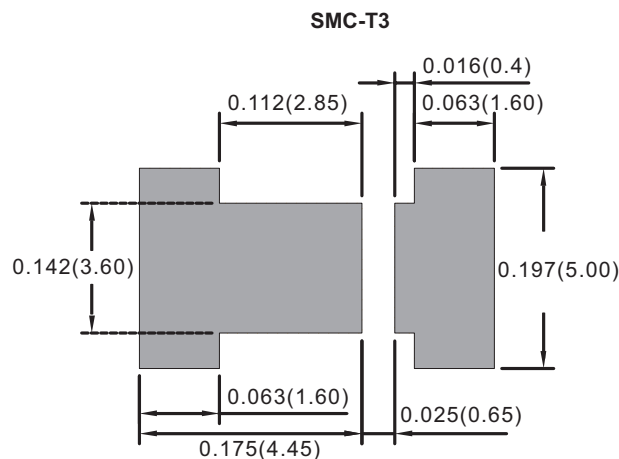
-T: Taping Reel

Pb-Free package is available

RoHS product for packing code suffix "G"

Halogen free product for packing code suffix "H"

Suggested solder pad layout



Dimensions in inches and (millimeters)



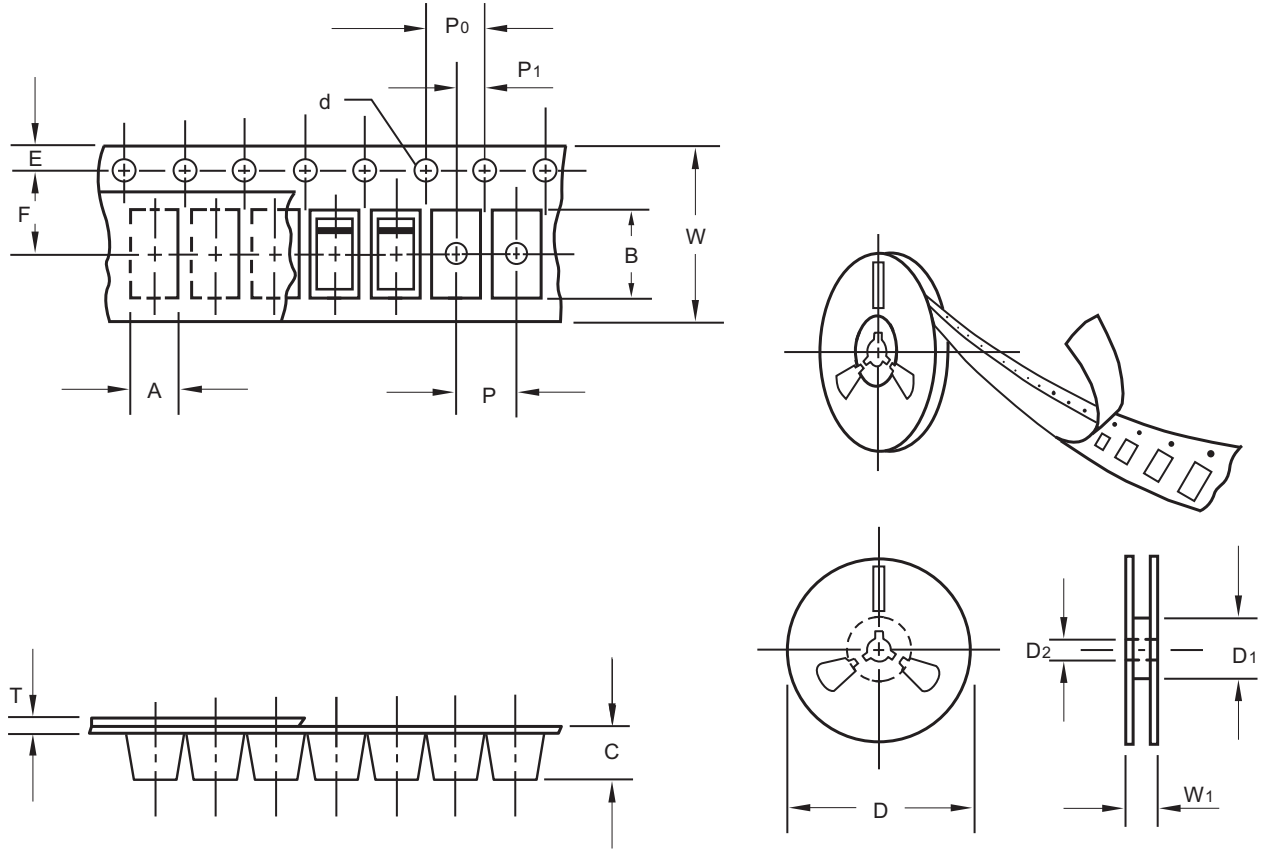
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FM1040-T' THRU FM10200-T'

10.0A SCHOTTKY BARRIER RECTIFIERS -40V- 200V SMC-T' PACKAGE

Packing information



unit:mm

Item	Symbol	Tolerance	SMC-T3
Carrier width	A	0.1	4.85
Carrier length	B	0.1	6.95
Carrier depth	C	0.1	1.85
Sprocket hole	d	0.1	1.50
13" Reel outside diameter	D	2.0	330.00
13" Reel inner diameter	D1	min	50.00
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	5.50
Punch hole pitch	P	0.1	8.00
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	12.00
Reel width	W1	1.0	18.00

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

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