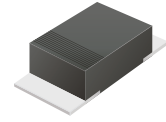


CFRM101-G Thru. CFRM107-G

Voltage: 50 to 1000 Volts

Current: 1.0 A

RoHS Device

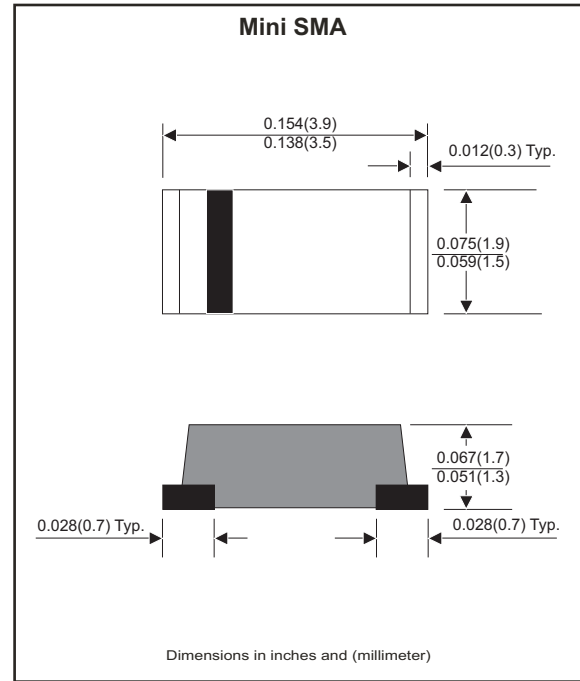


Features

- Plastic package has Underwriters Laboratory flammability classification 94V-0 utilizing flame retardant epoxy molding compound.
- For surface mounted applications.
- Exceeds environmental standard of MIL-STD-19500/228.
- Low leakage current.

Mechanical data

- Case: Molded plastic, JEDEC SOD-123/Mini SMA.
- Terminals: Solder plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Weight: 0.018 grams approx.



Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter		Symbol	CFRM 101-G	CFRM 102-G	CFRM 103-G	CFRM 104-G	CFRM 105-G	CFRM 106-G	CFRM 107-G	Unit
Repetitive peak reverse voltage		V _{RRM}	50	100	200	400	600	800	1000	V
RMS voltage		V _{RMS}	35	70	140	280	420	560	700	V
Continuous reverse voltage		V _R	50	100	200	400	600	800	1000	V
Forward rectified current		I _O	1.0							A
Maximum forward voltage @I _F = 1.0A		V _F	1.3							V
Forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	30							A
Reverse current, V _R =V _{RRM}	@T _A = 25 °C	I _R	5.0							μA
	@T _A =100 °C		100							
Reverse recovery time (note 1)		t _{rr}	150				250	500		nS
Thermal resistance, junction to ambient air		R _{θJA}	42							°C/W
Diode junction capacitance		C _J	15							pF
Operating junction temperature f=1MHz and applied 4V DC reverse voltage		T _J	-55 to +150							°C
Storage temperature range		T _{STG}	-65 to +175							°C

Note 1. Reverse recovery time test condition , $I_F=1.0A$, $I_{RR}=0.25A$

Rating and Characteristic Curves (CFRM101-G Thru. CFRM107-G)

Fig.1 Forward Characteristics

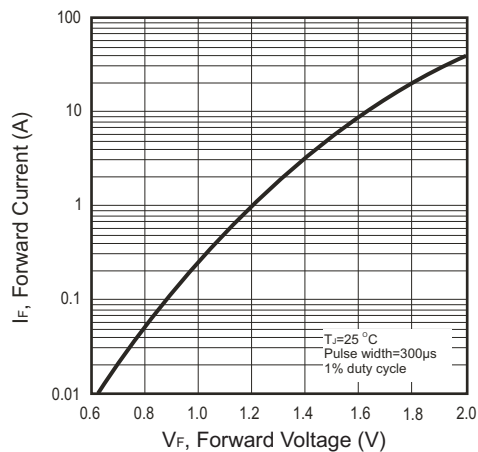


Fig.2 Forward Current Derating Curve

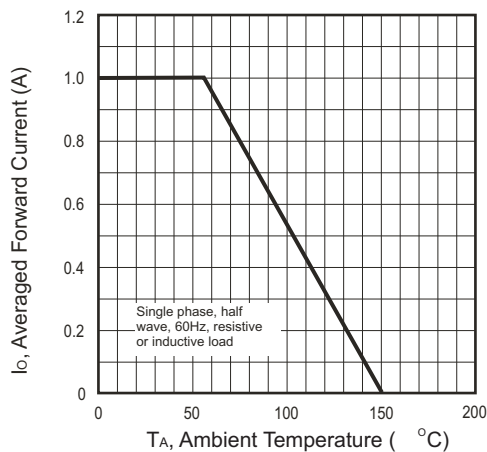


Fig.3 Max. Non-repetitive Forward Surge Current

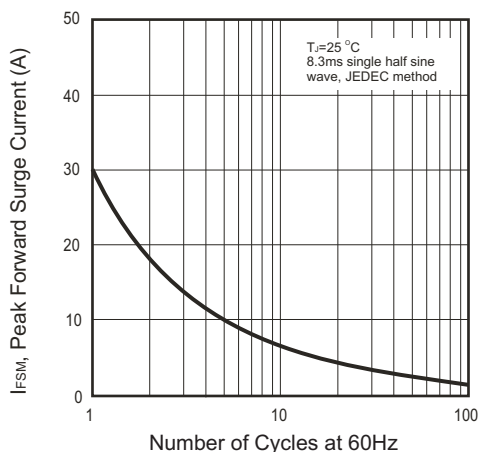


Fig.4 Typical Junction Capacitance

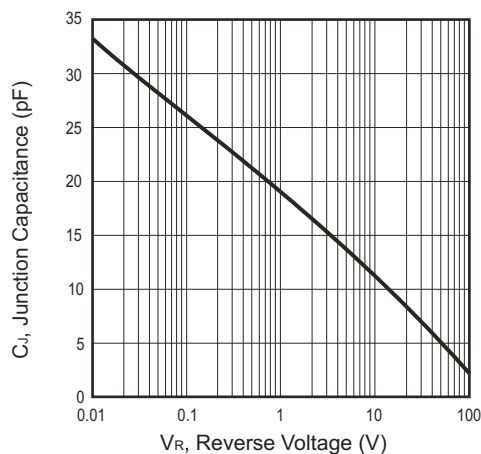
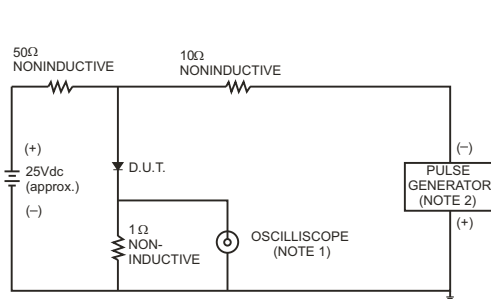
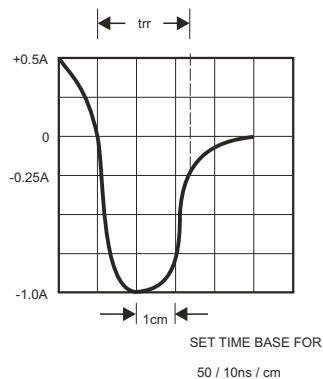


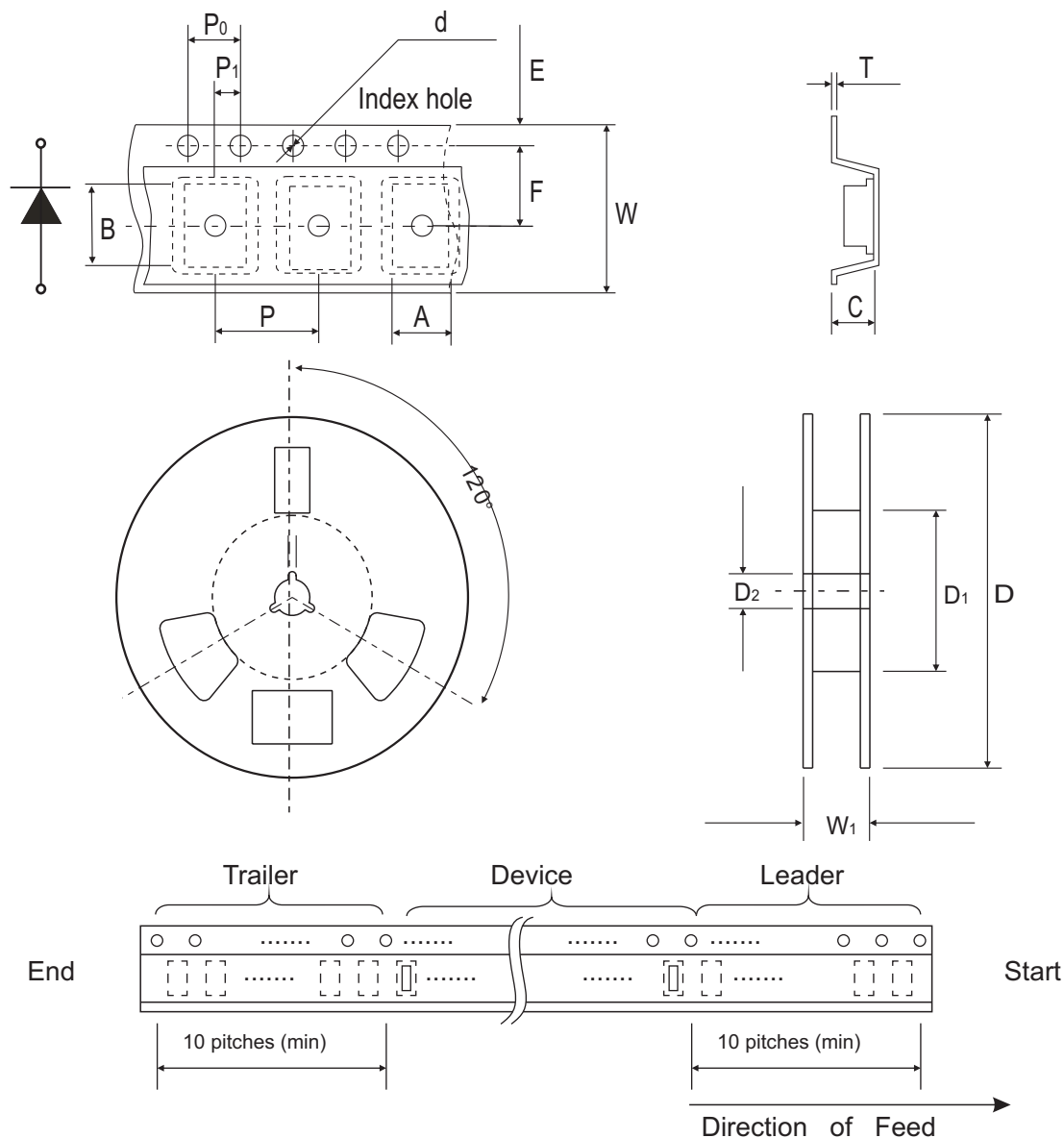
Fig.5 Test Circuit Diagram and Reverse Recovery Time Characteristics



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.



Reel Taping Specification



Mini-SMA/SOD-123	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	1.90 ± 0.10	3.90 ± 0.10	1.68 ± 0.10	1.50 ± 0.10	178 ± 2.00	62.0 MIN.	13.0 ± 0.50
	(inch)	0.075 ± 0.004	0.153 ± 0.004	0.066 ± 0.004	0.059 ± 0.004	7.00 ± 0.079	2.440 MIN.	0.512 ± 0.020

Mini-SMA/SOD-123	SYMBOL	E	F	P	P ₀	P ₁	T	W	W ₁
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.23 ± 0.10	8.00 ± 0.30	11.40 ± 1.0
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.004	0.314 ± 0.012	0.449 ± 0.039

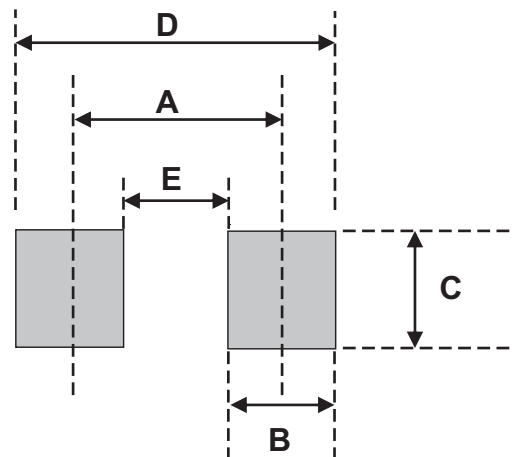
Marking Code

Part Number	Marking Code
CFRM101-G	F1
CFRM102-G	F2
CFRM103-G	F3
CFRM104-G	F4
CFRM105-G	F5
CFRM106-G	F6
CFRM107-G	F7



Suggested PAD Layout

SIZE	Mini-SMA/SOD-123	
	(mm)	(inch)
A	3.30	0.130
B	1.40	0.055
C	1.90	0.075
D	4.70	0.185
E	1.90	0.075



Standard Package

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
Mini-SMA/SOD-123	2500	7