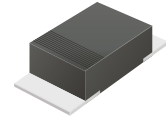


## CFRM101-G Thru. CFRM107-G

Voltage: 50 to 1000 Volts

Current: 1.0 A

RoHS Device

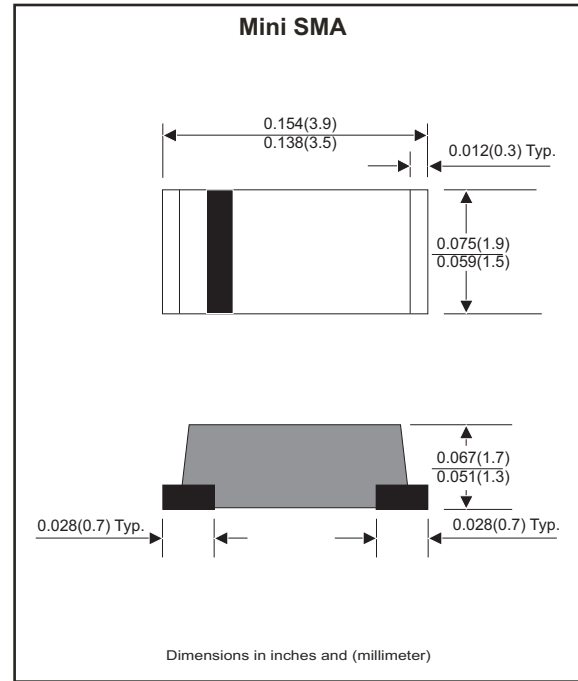


### Features

- 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, $V_R=V_{RRM}$	@ $T_A=25^\circ C$	5.0							$\mu A$
	@ $T_A=100^\circ C$	100							
Reverse recovery time (note 1)	$t_{rr}$	150			250	500		nS	
Thermal resistance, junction to ambient air	$R_{\theta JA}$	42							$^\circ C/W$
Diode junction capacitance	$C_J$	15							pF
Operating junction temperature <small>f=1MHz and applied 4V DC reverse voltage</small>	$T_J$	-55 to +150							$^\circ C$
Storage temperature range	$T_{STG}$	-65 to +175							$^\circ C$

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

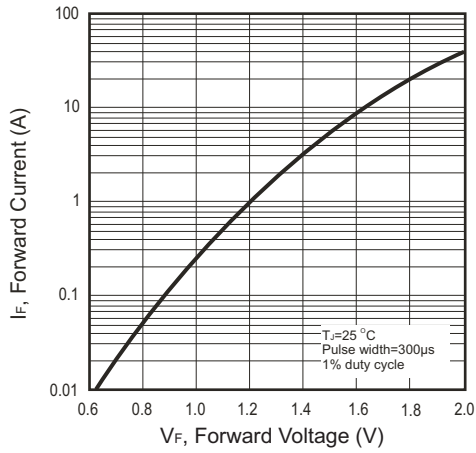


Fig.2 Forward Current Derating Curve

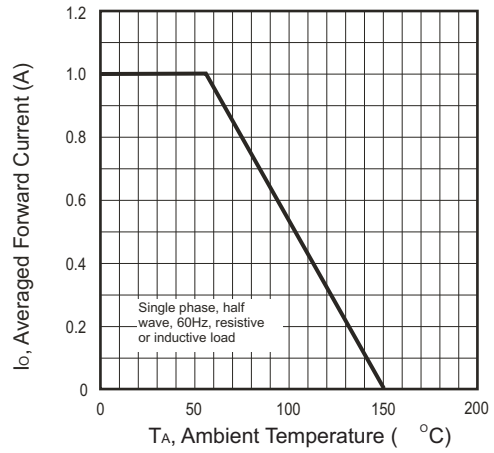


Fig.3 Max. Non-repetitive Forward Surge Current

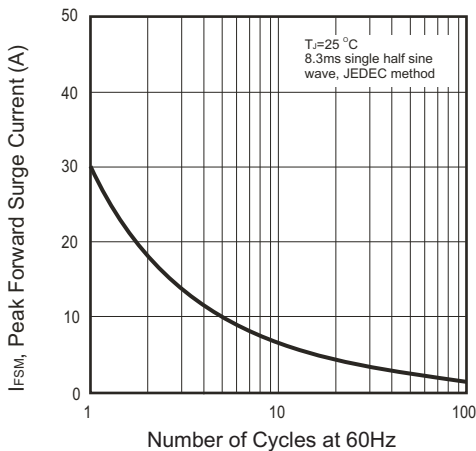


Fig.4 Typical Junction Capacitance

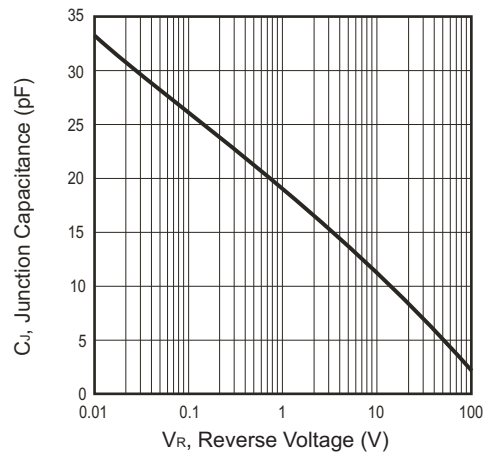
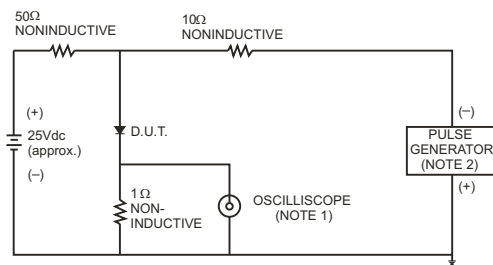
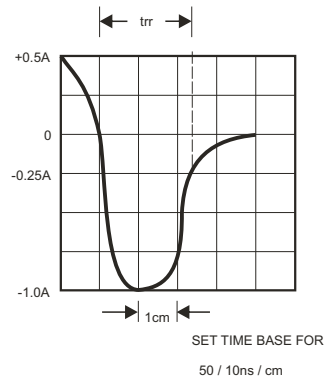


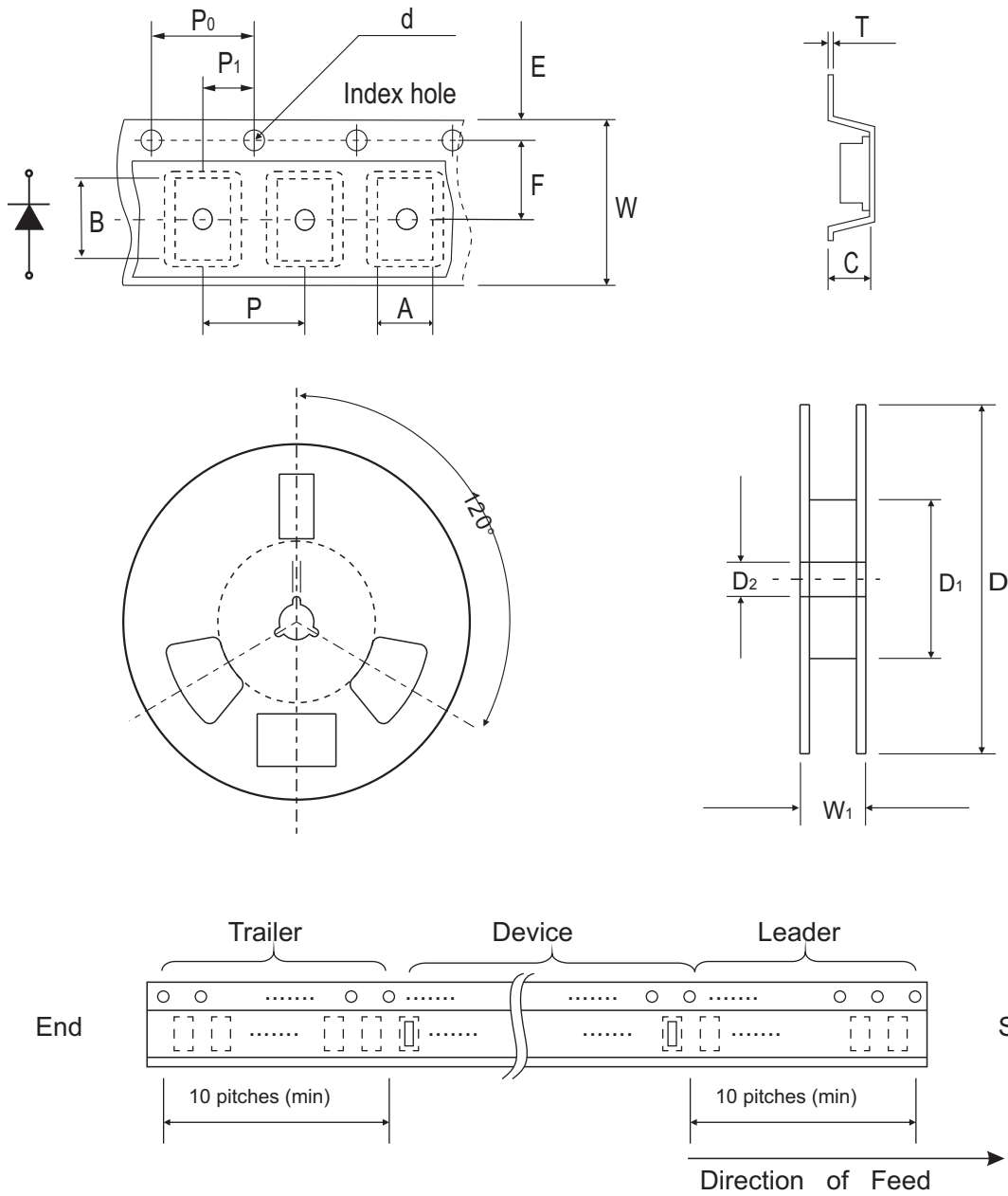
Fig.5 Test Circuit Diagram and Reverse Recovery Time Characteristics



- 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	D1	D2
	(mm)	$1.90 \pm 0.10$	$3.90 \pm 0.10$	$1.68 \pm 0.10$	$1.50 \pm 0.10$	$178 \pm 2.00$	62.0 MIN.	$13.0 \pm 0.50$
	(inch)	$0.075 \pm 0.004$	$0.153 \pm 0.004$	$0.066 \pm 0.004$	$0.059 \pm 0.004$	$7.00 \pm 0.079$	2.440 MIN.	$0.512 \pm 0.020$

Mini-SMA/SOD-123	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	$1.75 \pm 0.10$	$3.50 \pm 0.10$	$4.00 \pm 0.10$	$4.00 \pm 0.10$	$2.00 \pm 0.10$	$0.23 \pm 0.10$	$8.00 \pm 0.30$	$11.40 \pm 1.0$
	(inch)	$0.069 \pm 0.004$	$0.138 \pm 0.004$	$0.157 \pm 0.004$	$0.157 \pm 0.004$	$0.079 \pm 0.004$	$0.009 \pm 0.004$	$0.314 \pm 0.012$	$0.449 \pm 0.039$

## Marking Code

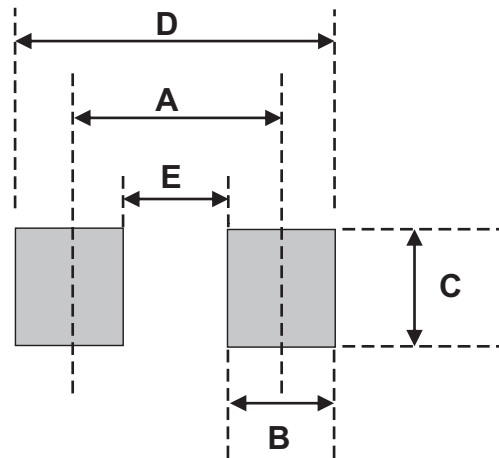
Part Number	Marking Code
CFRM101-G	F1
CFRM102-G	F2
CFRM103-G	F3
CFRM104-G	F4
CFRM105-G	F5
CFRM106-G	F6
CFRM107-G	F7



xx= Product type marking code

## 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 Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
Mini-SMA / SOD-123	2,500	7