
SURFACE MOUNT THYRISTOR

Compliance Standard

- ◆ IEC 61000-4-5 (10/700us 4KV)
- ◆ GR1089
- ◆ ITU-T K.21
- ◆ TIA-968-A

Applications

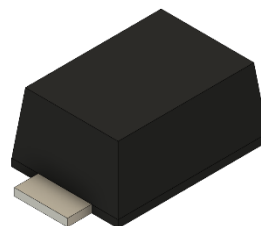
- ◆ T1/E1
- ◆ SLIC Line Interface
- ◆ ADSL/ISDN Line Interface
- ◆ Ethernet

Features

- ◆ Bi-directional Configuration
- ◆ Quick Response
- ◆ High Surge Capability
- ◆ Low Leakage Current

Mechanical Characteristics

- ◆ SMF Package
- ◆ Weight 10 Milligram (Approximate)
- ◆ Flammability Rating UL94V-0
- ◆ Lead Free Plating
- ◆ Reel Size 7"
- ◆ 2,000 PCS Per Reel

Package**SMF****Device Symbol**

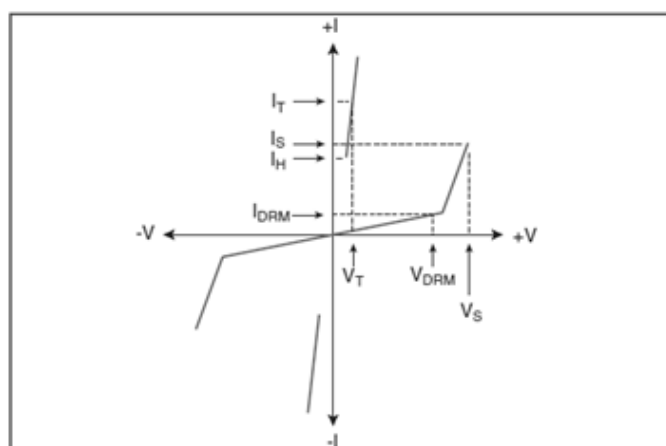
DEVICE CHARACTERISTICS

Maximum Rating			
Parameter	Symbol	Value	Unit
Surge Current—60Hz	I_{TSM}	13	A
Lead Soldering Temperature	T_L	260 (10s)	°C
Operating Temperature Range	T_J	-40~150	°C
Storage Temperature Range	T_{STG}	-55~150	°C

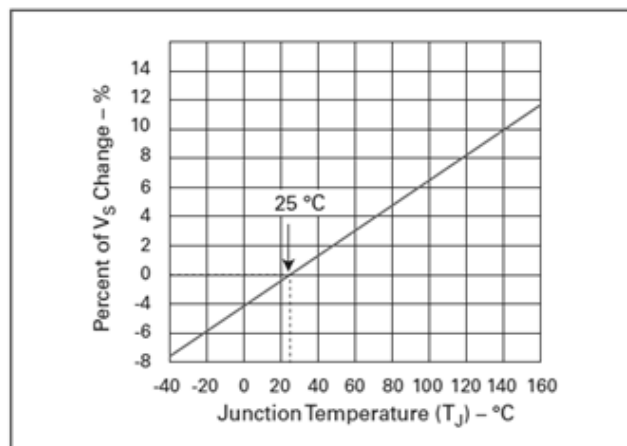
Electrical Characteristics (@25 °C)								
Part Number	V_{DRM} (Volt)	V_S (Volt)	I_S (mA)	I_{DRM} (uA)	I_H (mA)	I_T (A)	V_T (V)	C_o (pF)
NLC2K31SMF	280	400	800	5	10	1	2	45

C_o Test Condition : 1MHz @ 2V Bias

Surge Rating @ 25 °C							
Series	I_{PP} 2x10 μ s Amps	I_{PP} 8x20 μ s Amps	I_{PP} 10x160 μ s Amps	I_{PP} 5x310 μ s Amps	I_{PP} 10x560 μ s Amps	I_{PP} 10x1000 μ s Amps	di/dt Amps/ μ s
2KxxSMF	250	200	120	75	70	50	500



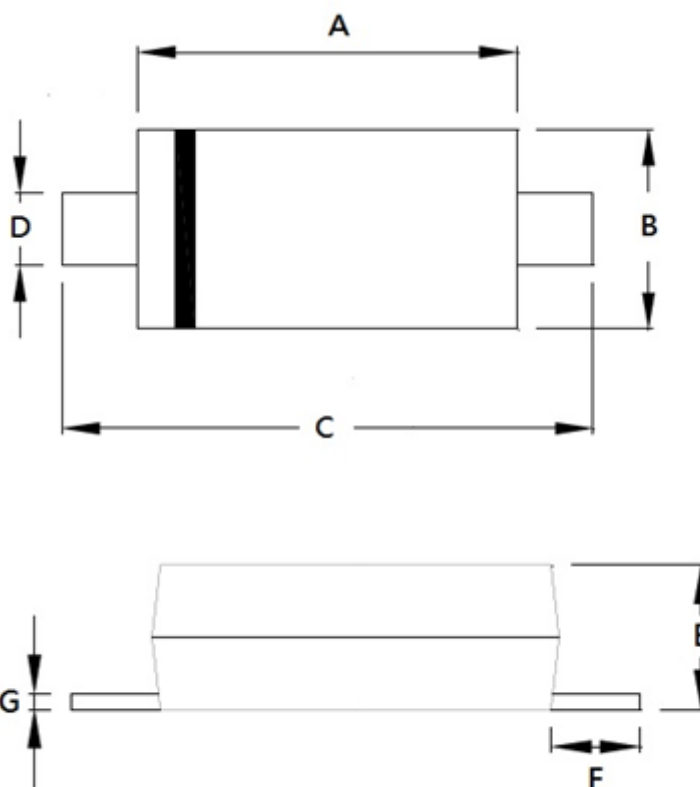
I-V Characteristic



VS Variation

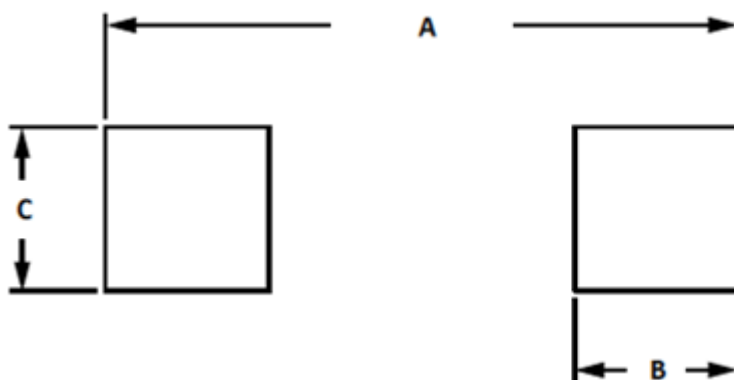
DEVICE OUTLINE

Outline Dimension				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.65	2.95	0.104	0.116
B	1.65	1.95	0.065	0.077
C	3.50	3.90	0.137	0.153
D	0.75	0.95	0.029	0.037
E	1.20	1.40	0.047	0.055
F	0.40	0.60	0.015	0.023
G	0.10	0.30	0.004	0.012



LAYOUT PAD DIMENSION

<i>Layout PAD Dimension</i>				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	4.10	4.30	0.161	0.169
B	1.50	1.70	0.059	0.067
C	0.90	1.10	0.035	0.043



<i>Revision History</i>	<i>Description</i>
v2.0	Re-organize datasheet layout