

LT3021

Tripolar Overvoltage Protection for Network Interfaces

Revision:B

General Description

The LT3021 is a low capacitance transient surge arrestor designed for protection of high debit rate communication network. Its low capacitance avoids distortion of the signal as it has been designed for T1/E1 and Ethernet networks.

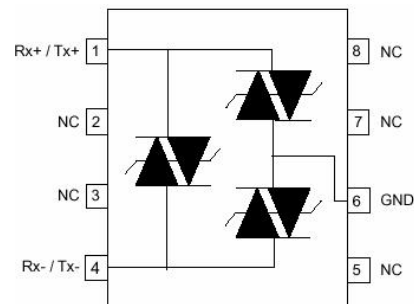
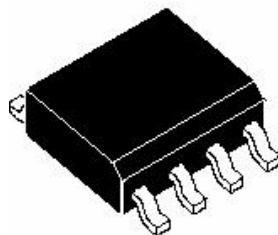
Applications

Dedicated to dataline protection, this device provides a tripolar protection function. It ensure the same protection capability with the same breakdown voltage in both common and differential modes.

Features

- Tripolar crowbar protection
- Low capacitance
- Repetitive peak pulse current:
 $I_{pp}=30A$ (10/1000 μs)
- Low holding current: $I_H=30mA$

SO-8



Electrical Parameter

Symbol	Parameter
V_{DRM}	Stand-off voltage
I_{DRM}	Leakage current V_{DRM}
V_{BR}	Continuous reverse voltage
V_{BO}	Breakover voltage
I_H	Holding current
I_{BO}	Breakover current
I_{pp}	Peak pulse current
C	Capacitance

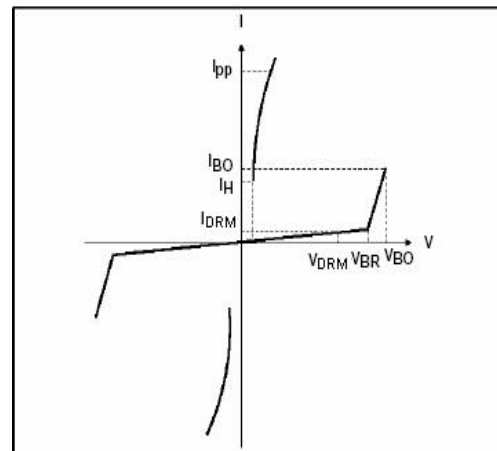
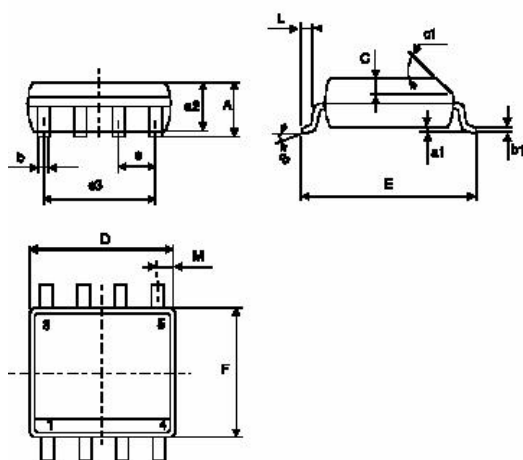


Fig1. LT3021 Characteristic Curve

Electrical Characteristics (Tamb=25°C)

V_{DRM}	I_{DRM}	V_{BO}	I_{BO}	V_T	I_T	I_H	Co	Ipp (10/1000us)
Max.		Max.	Max.	Max.	Max.	Min.	Max.	
V	uA	V	mA	V	A	mA	pF	A
28	10	38	300	5	1	30	25	30

SO-8 MECHANICAL DATA



REF.	DIMENSIONS					
	Millimetres			Inches		
	Min.	Typ.	Max.	Min.	Typ.	Max.
A			1.75			0.069
a1	0.1		0.25	0.004		0.010
a2			1.65			0.065
b	0.35		0.48	0.014		0.019
b1	0.19		0.25	0.007		0.010
C		0.50			0.020	
c1	45° (typ)					
D	4.8		5.0	0.189		0.197
E	5.8		6.2	0.228		0.244
e		1.27			0.050	
e3		3.81			0.150	
F	3.8		4.0	0.15		0.157
L	0.4		1.27	0.016		0.050
M			0.6			0.024
S	8° (max)					