

50W 5-Line Array Surface Mount TVS Diodes

FEATURES

- Protects five I/O lines
- 5V working voltage
- Transient protection for data, signal, and Vcc bus to IEC 61000-4-2 (ESD) & IEC 61000-4-4 (EFT)
- Low Leakage Current
- Solid state silicon avalanche technology
- Low operating and clamping voltages

MECHANICAL DATA

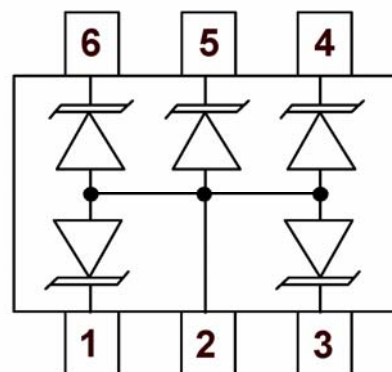
- JEDEC SOT-563 package
- Solder temperature: 265°C for 10 seconds
- Readily solderable terminals

APPLICATION

- Cordless phones
- Cellular phones & accessories
- Audio/Video inputs
- Portable electronics (Digital Cameras, MP3 Players, etc.)
- Networks

The **N055AT56** Series of transient voltage suppressors are designed to protect components which are connected to multi-line data and transmission lines from over voltages caused by electrostatic discharge (ESD), electrical fast transients (EFT), and induced lightning.

SCHEMATIC & PIN CONFIGURATION



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Pulse Power (tp = 8 x 20 μs)	P _{pk}	40	W
Operating Temperature	T _j	-55 to +150	°C
Storage Temperature	T _{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

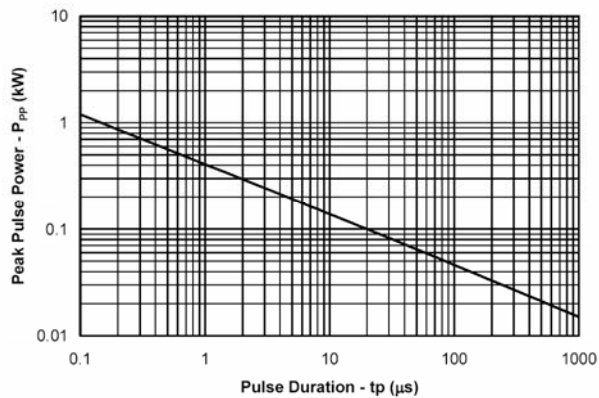
PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNIT
Reverse Breakdown Voltage	V _{BR}	I _t = 1mA	6.15	6.5	7.15	V
Clamping Voltage	V _C	I _{pp} = 1A ¹	-	-	9	V
Maximum Peak Pulse Current	I _{pp}	t _p = 8/20μs	-	-	3.5	A
Reverse Leakage Current	I _R	V _{RWM} = 5V	-	10	35	μA
Diode Capacitance	C _D	V _R = 0V, f = 1MHz	-	22	28	pF
Differential Resistance	r _{diff}	I _r = 1mA	-	20	100	Ohms

Note:

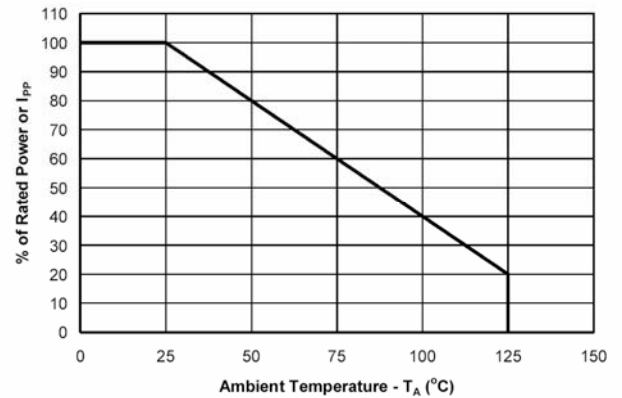
1. Clamping voltage values are based upon an industry standard 8 x 20μs peak pulse current (I_{pp}) waveform.

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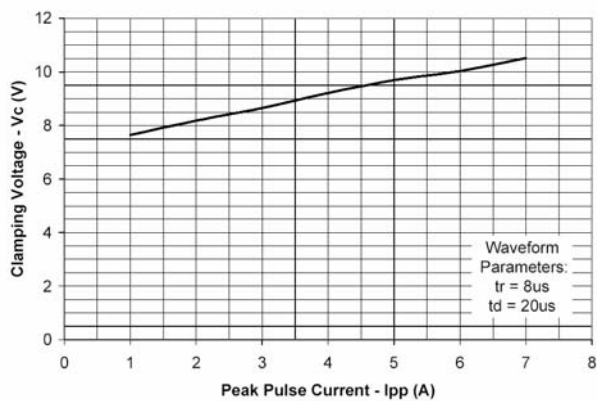
Non-Repetitive Peak Pulse Power vs. Pulse Time



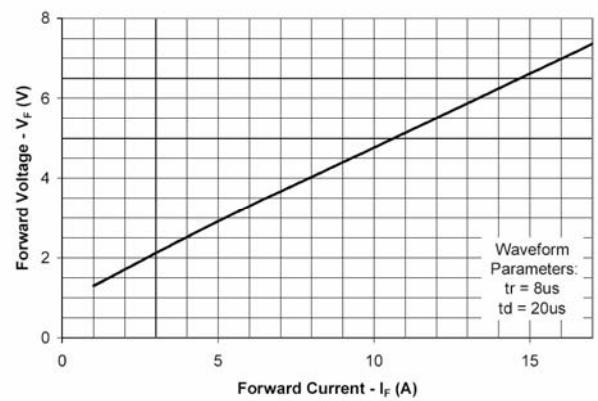
Power Derating Curve



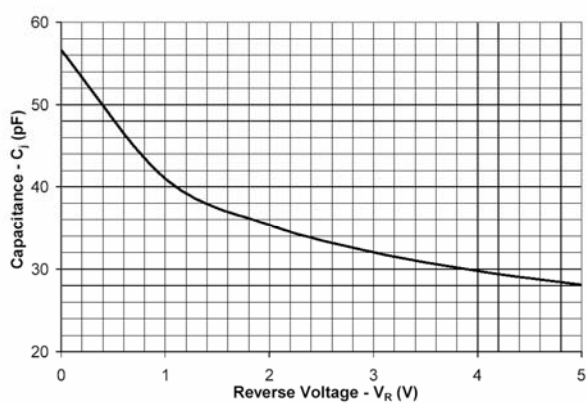
Clamping Voltage vs. Peak Pulse Current



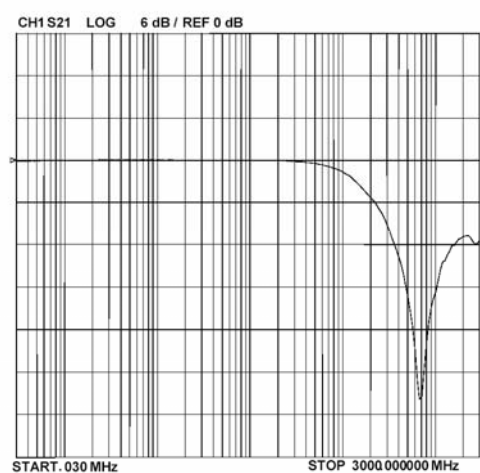
Forward Voltage vs. Forward Current



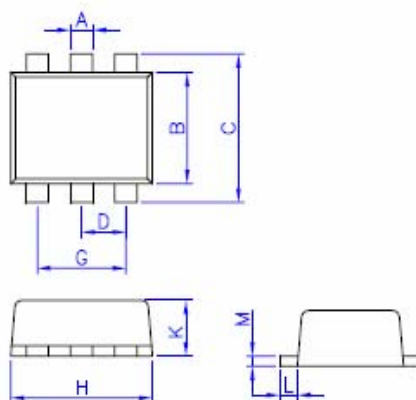
Junction Capacitance vs. Reverse Voltage



Insertion Loss S21

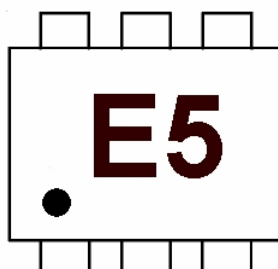


PACKAGE DIMENSIONS



SOT-563			
Dimension	Min.	Max.	Typ.
A	0.15	0.30	0.25
B	1.10	1.25	1.20
C	1.55	1.70	1.60
D	0.50		
G	0.90	1.10	1.00
H	1.50	1.70	1.60
K	0.56	0.60	0.60
L	0.10	0.30	0.20
M	0.10	0.18	0.11
ALL Dimension in mm			

MARKING CODE



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