



N505AT56

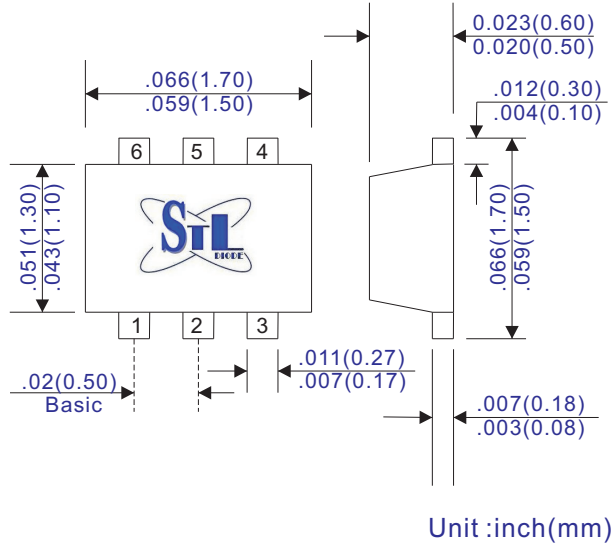
5-Line SMD Transient Voltage Suppressor Array - 5.0V



FEATURES

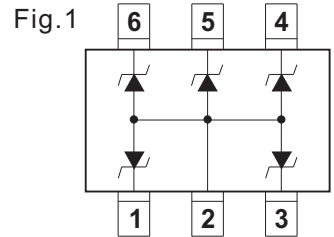
- Protects 5 I/O lines
- 5.0V working voltage
- Designed to protect components which are connected to multi-line data and transmission lines from over voltages caused by electrostatic discharge (ESD), electrical fast transients (EFT), and induced lightning
- Transient protection for data lines to IEC 61000-4-2 (ESD) 15KV(air), 8KV(contact) IEC 61000-4-4 (EFT) 40A (tp=5/50nS)
- Low leakage current
- Solid state silicon avalanche technology
- Low operating and clamping voltages
- Application
 - Cordless phone
 - Cellular phones and accessories
 - Audio/Video inputs
 - Portable electronics (Digital cameras, Mp3 player, etc.)
 - Networks

SOT-563



MECHANICAL DATA

- Case: Molded plastic SOT-563
- Epoxy: UL94-V0 rated flame retardant
- Terminals: Solderable per MIL-STD-750 Method 2026
- Schematic pin configuration, see Fig. 1
- Mounting Position: Any
- Weight: 0.016 grams (approximate)



MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS
 Ratings at 25°C ambient temperature unless otherwise specified

	Symbols	N505AT56	Units
Peak Pulse Power (tp=8/20µS)	P _{pk}	40	Watts
Maximum Peak Pulse Current	I _{pp}	3.5	Amps
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V _{pp}	±15 ±8	KV
Reverse Breakdown Voltage	V _{BR}	6.15 ~ 7.15	Volts
Maximum Clamping Voltage (I _{pp} =1A, tp=8/20µS)	V _C	9.0	Volts
Reverse Leakage Current	I _R	35	µA
Maximum Diode Capacitance, V _R =0V, f=1MHz	C _D	28	pF
Differential Resistance, I _R =1mA	R _{diff}	100	Ω
Operating & Storage Temperature Range	T _J , T _{STG}	-55 ~ +150	°C



Fig.2 - Non-Repetitive Peak Pulse Power

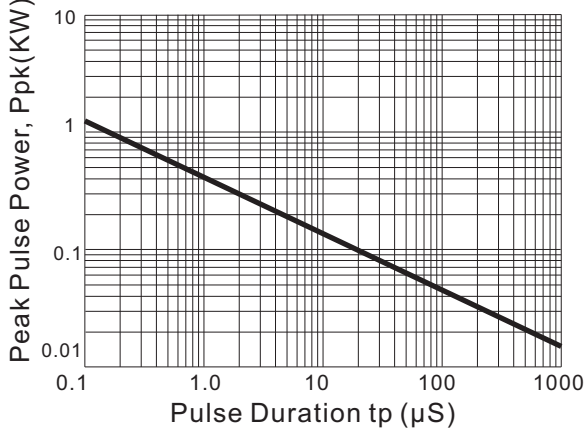


Fig. 3 - Power Derating Curve

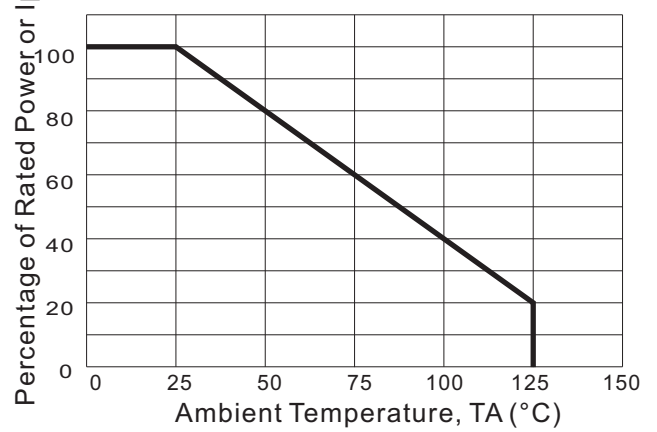


Fig. 4 - Clamping Voltage Characteristics

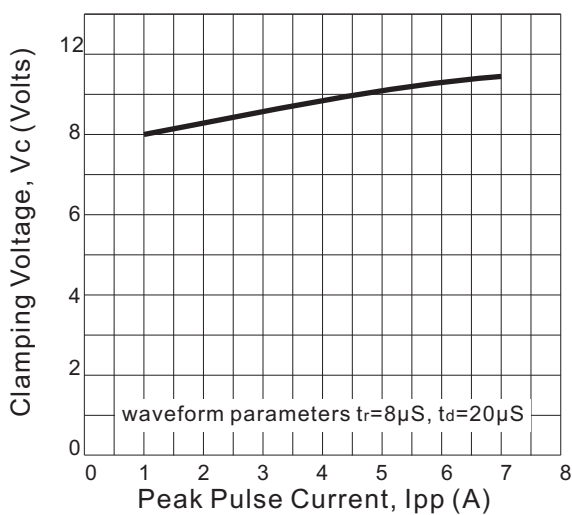


Fig. 5 - Typical Forward Characteristics

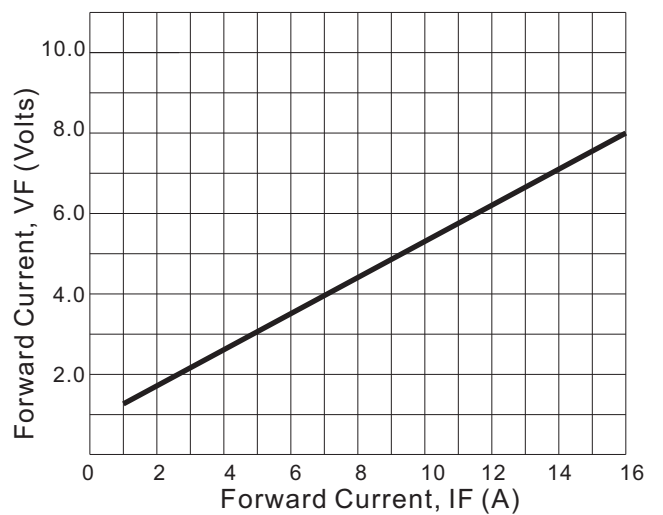


Fig. 6 - Typical Junction Capacitance

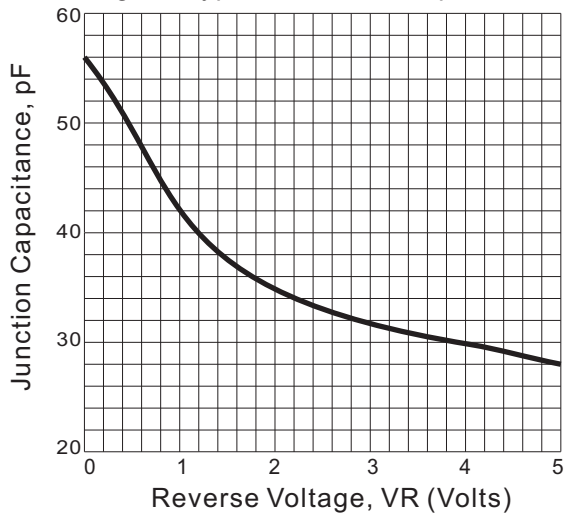


Fig. 7 - Insertion Loss S21

