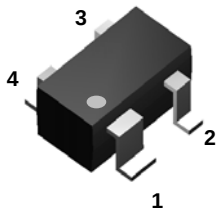
PRELIMINARY

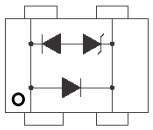
LOW CAPACITANCE SINGLE TVS 350W FOR HIGH SPEED DATA LINES

This Transient Voltage Suppressor is intended to Protect Sensitive Equipment against Electrostatic Discharge and Transient Events as well to offer a Miminum insertion loss in high speed data communication transmission line ports used in Portable Consumer, Computing and Networking Applications.

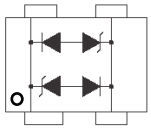
SOT143



Unidirectional



Bi-directional



SPECIFICATION FEATURES

- **Working Peak Reverse Voltage Range 5, 12, 15 and 24V**
- **Max Power Dissipation of 350W, 8/20µs**
- **Maximum Leakage Current of 2µA**
- **IEC61000-4-2 Compliance 15kV Air, 8kV Contact Discharge**
- **Typical capacitance of 7pF (Unidirectional), 5pF (Bi-directional) at 0Vdc**
- **Unidirectional and Bi-directional versions available**
- **100% Tin Matte lead finish (RoHS Compliant)**

APPLICATIONS

- **Mobile Phones and accessories**
- **Universal Serial Bus (USB1.1 and 2.0) Applications**
- **Portable Consumer Electronics**
- **Instrumentation Equipment**
- **Video I/O Ports**

MAXIMUM RATINGS

Rating	Symbol	Value	Units
Peak Pulse Power 8/20µs Waveform	P_{pp}	350	W
ESD Voltage (HBM)	V_{ESD}	>25	kV
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{stg}	-55 to +150	°C
Lead Soldering Temperature (max 10 s)	T_L	260	°C

ELECTRICAL CHARACTERISTICS Tj = 25°C

PJSLC054, PJSLC054C

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{WRM}				5	V
Reverse Breakdown Voltage	V_{BR}	I_{BR} = 1mA	6			V
Reverse Leakage Current	I_R	V_R = 5V			2	µA
Clamping Voltage (8/20µs)	V_c	I_{pp} = 5A			10	V
Clamping Voltage (8/20µs)	V_c	I_{pp} = 17A			18.3	V
Maximum Peak Pulse Current	I_{pp}	8/20 µs Waveform			24	A
Off State Junction Capacitance	Cj	0 Vdc Bias f = 1MHz Between pins 1,4 and 2,3		7 (5)*		pF

* Note: Cj values - Unidirectional (Bi-directional)

PRELIMINARY

ELECTRICAL CHARACTERISTICS Tj = 25°C

PJSLC124, PJSLC124C

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{WRM}				12	V
Reverse Breakdown Voltage	V_{BR}	I_{BR} = 1mA	13.3			V
Reverse Leakage Current	I_R	V_R = 12V			2	µA
Clamping Voltage (8/20µs)	V_c	I_{pp} = 5A			18	V
Clamping Voltage (8/20µs)	V_c	I_{pp} = 15A			22	V
Maximum Peak Pulse Current	I_{pp}	8/20 µs Waveform			17	A
Off State Junction Capacitance	Cj	0 Vdc Bias f = 1MHz Between pins 1,4 and 2,3		7 (5)*		pF

PJSLC154, PJSLC154C

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{WRM}				15	V
Reverse Breakdown Voltage	V_{BR}	I_{BR} = 1mA	16.7			V
Reverse Leakage Current	I_R	V_R = 15V			2	µA
Clamping Voltage (8/20µs)	V_c	I_{pp} = 5A			24	V
Clamping Voltage (8/20µs)	V_c	I_{pp} = 12A			28	V
Maximum Peak Pulse Current	I_{pp}	8/20 µs Waveform			15	A
Off State Junction Capacitance	Cj	0 Vdc Bias f = 1MHz Between pins 1,4 and 2,3		7 (5)*		pF

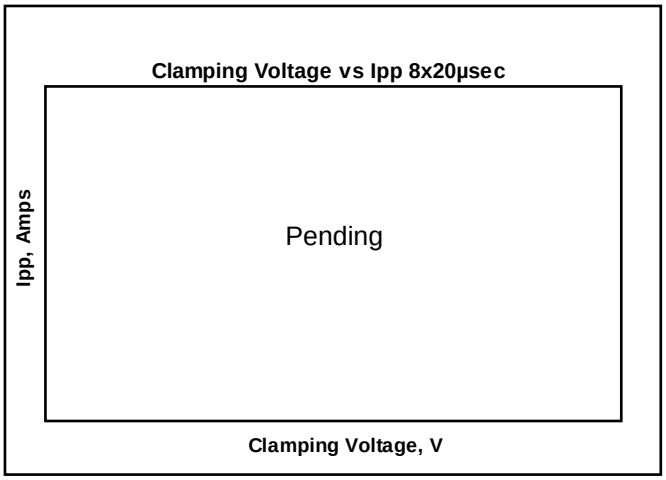
PJSLC244, PJSLC244C

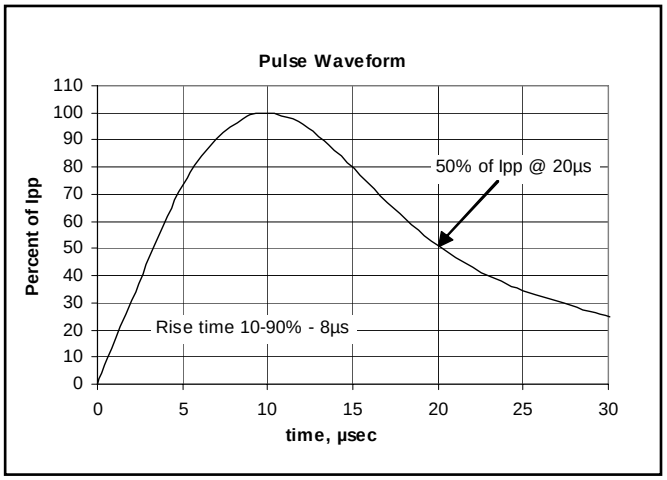
Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{WRM}				24	V
Reverse Breakdown Voltage	V_{BR}	I_{BR} = 1mA	26.7			V
Reverse Leakage Current	I_R	V_R = 24V			2	µA
Clamping Voltage (8/20µs)	V_c	I_{pp} = 5A			36	V
Clamping Voltage (8/20µs)	V_c	I_{pp} = 8A			43	V
Maximum Peak Pulse Current	I_{pp}	8/20 µs Waveform			10	A
Off State Junction Capacitance	Cj	0 Vdc Bias f = 1MHz Between pins 1,4 and 2,3		7 (5)*		pF

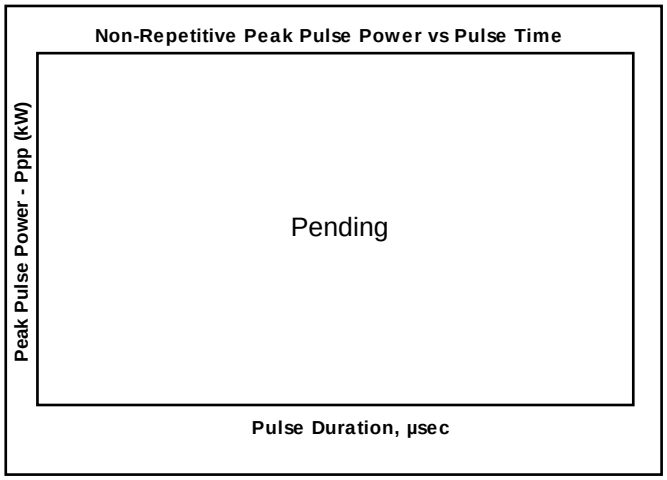
* Note: Cj values - Unidirectional (Bi-directional)

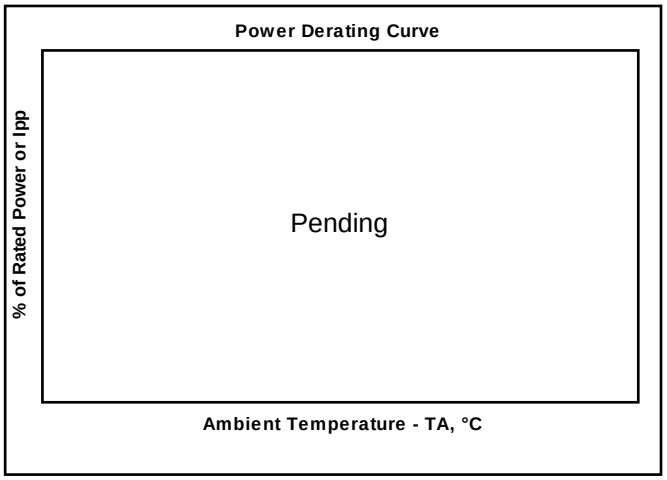
PRELIMINARY

TYPICAL CHARACTERISTIC CURVES



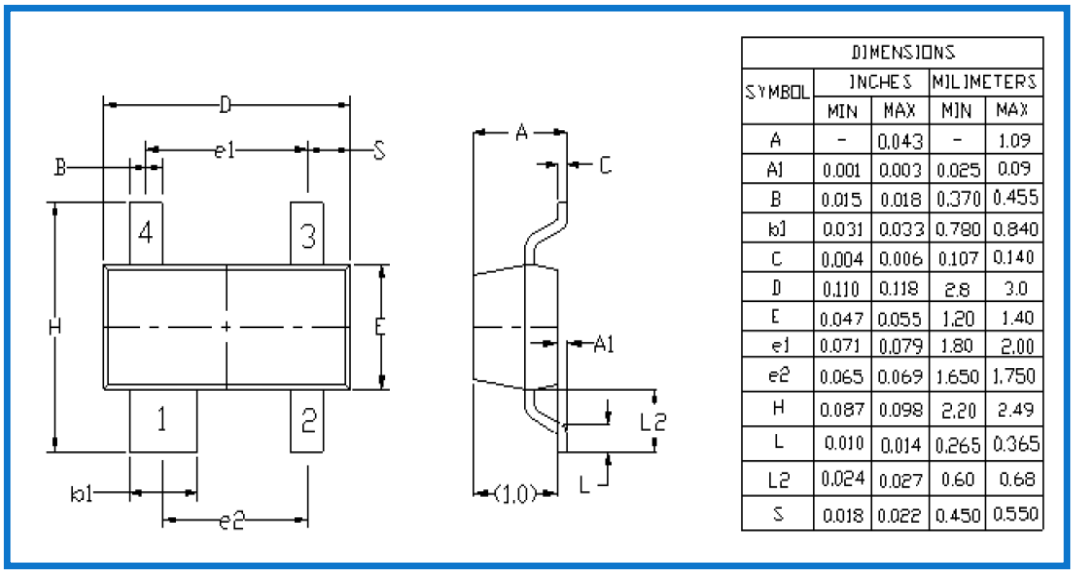




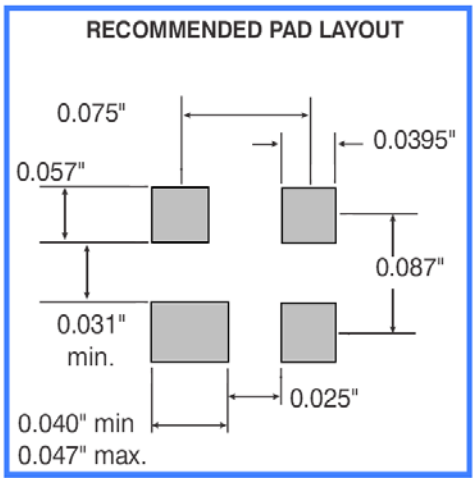


PRELIMINARY

PACKAGE AND SUGGESTED PAD LAYOUT DIMENSIONS



SYMBOL	DIMENSIONS			
	INCHES		MILIMETERS	
	MIN	MAX	MIN	MAX
A	-	0.043	-	1.09
A1	0.001	0.003	0.025	0.09
B	0.015	0.018	0.370	0.455
b1	0.031	0.033	0.780	0.840
C	0.004	0.006	0.107	0.140
D	0.110	0.118	2.8	3.0
E	0.047	0.055	1.20	1.40
e1	0.071	0.079	1.80	2.00
e2	0.065	0.069	1.650	1.750
H	0.087	0.098	2.20	2.49
L	0.010	0.014	0.265	0.365
L2	0.024	0.027	0.60	0.68
S	0.018	0.022	0.450	0.550



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