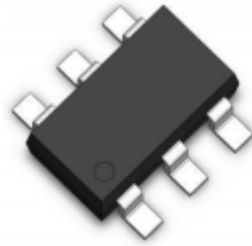


Transient Voltage Suppressors for ESD Protection

ESDXXV26T-5L Series

Description

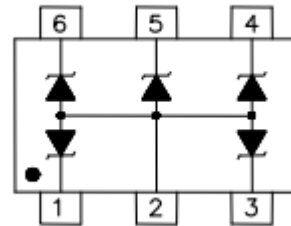
The ESDXXV26T-5L Series is designed to protect voltage sensitive components from ESD and transient voltage events. Excellent clamping capability, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium.



Feature

- ◆ 350 Watts Peak Pulse Power per Line ($t_p=8/20\mu s$)
- ◆ Protects four unidirectional I/O lines
- ◆ Low clamping voltage
- ◆ Working voltage : 5V~24V
- ◆ Low leakage current
- ◆ IEC61000-4-2 (ESD) $\pm 30kV$ (air), $\pm 30kV$ (contact) :3.3~12V
- ◆ IEC61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact) :15~24V
- ◆ IEC61000-4-4 (EFT) 40A (5/50ns)

Functional Diagram



Applications

- ◆ RS-232, RS-422 & RS-423 Data Lines
- ◆ Audio/Video Inputs
- ◆ Wireless Network Systems
- ◆ Digit Video Interface (DVI)
- ◆ Medical Sensors
- ◆ Notebook Computers

Mechanical Data

- ◆ JEDEC SOT-26 Package
- ◆ Molding Compound Flammability Rating : UL 94V-0
- ◆ Weight 14.0 Milligrams (Approximate)
- ◆ Lead Finish : Lead Free

Mechanical Characteristics

Symbol	Parameter	Value	Units
Ppp	Peak Pulse Power ($t_p=8/20\mu s$ waveform)	350	Watts
TL	Lead Soldering Temperature	260 (10 sec.)	°C
T _{STG}	Storage Temperature Range	-55 to +150	°C
T _J	Operating Junction Temperature Range	-55 to +150	°C

Transient Voltage Suppressors for ESD Protection

ESDXXV26T-4L Series

Electrical Characteristics(@25°C Unless Otherwise Specified)

Part Number	Device Marking Code	Stand-Off Voltage VRMW (V)	Breakdown Voltage VBR(Min)	Test Current IT (mA)	V C@1A (V) Max	Vc		Maximum Reverse Leakage I R @V RWM (uA)	Typ Junction Capacitance (pF)
						(Max.)	(@A)		
ESD3.3V26T-5L	TC3	3.3	4.5	1.0	7.5	14.0	25.0	5.0	250.0
ESD05V26T-5L	TC5	5.0	6.0	1.0	9.8	15.0	24.0	1.0	200.0
ESD12V26T-5L	TCH	12.0	13.3	1.0	19.0	27.0	15.0	1.0	90.0
ESD15V26T-5L	TCJ	15.0	16.7	1.0	24.0	30.0	12.0	1.0	70.0
ESD24V26T-5L	TCK	24.0	26.7	1.0	38.0	46.0	8.0	1.0	50.0

Characteristics Curves

Fig1: 8/20μs Pulse Waveform

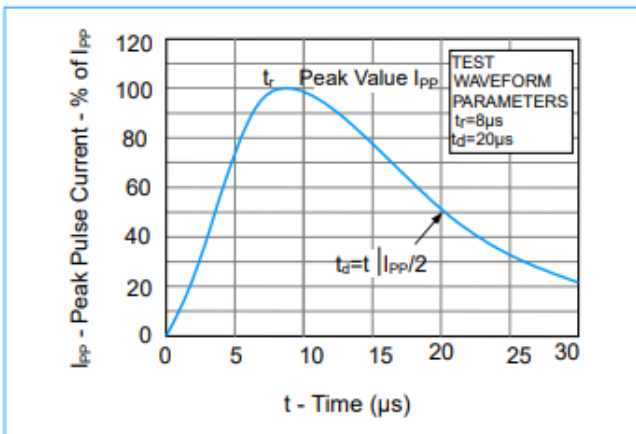


Fig2. Power Rating Derating Curve

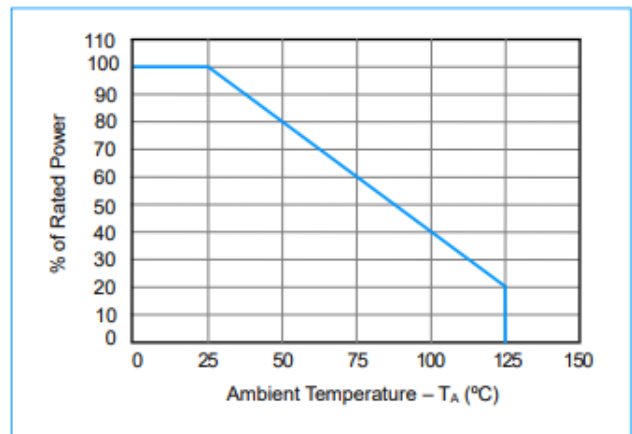
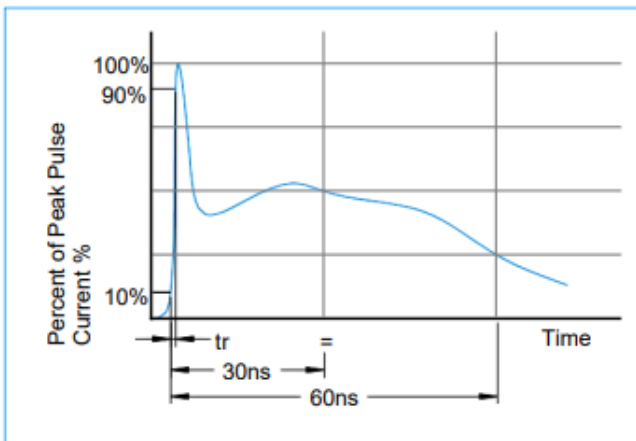


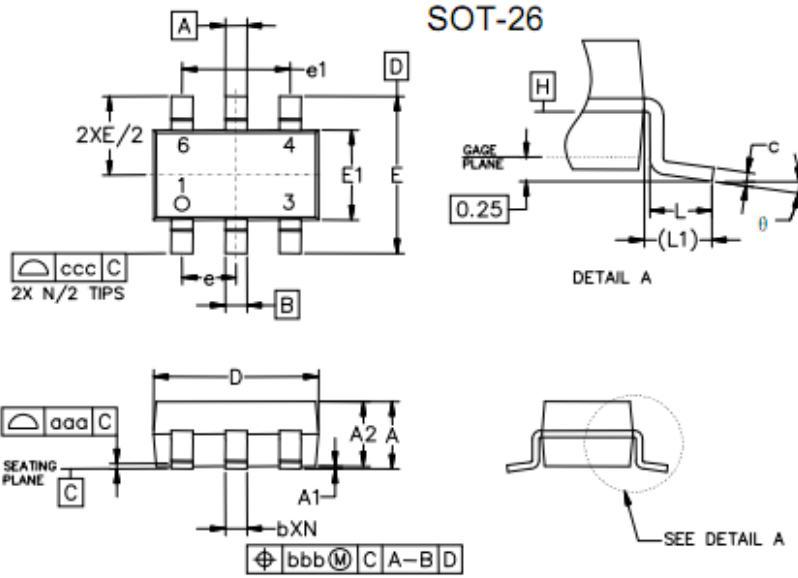
Fig3. ESD Pulse Waveform(according to IEC61000-4-2)



Transient Voltage Suppressors for ESD Protection

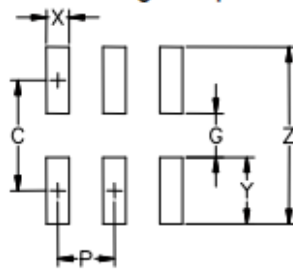
ESDXXV26T-5L

SOT-26 Package Outline & Dimensions



Symbol	Inches			Millimeters		
	Min.	Nom.	Max.	Min.	Nom.	Max.
A	0.035	-	0.057	0.90	-	1.45
A1	0.000	-	0.006	0.00	-	0.15
A2	0.035	0.045	0.051	0.90	1.15	1.30
b	0.010	-	0.020	0.25	-	0.50
c	0.003	-	0.009	0.08	-	0.22
D	0.110	0.114	0.122	2.80	2.	3.10
E1	0.060	0.063	0.069	1.50	1.60	1.75
E	0.110 BSC			2.80 BSC		
e	0.037 BSC			0.95 BSC		
e1	0.075 BSC			1.90 BSC		
L	0.012	0.018	0.024	0.30	0.45	0.60
L1	(0.024)			(0.60)		
theta	0°	-	10°	0°	-	10°
aaa	0.004			0.10		
bbb	0.008			0.20		
ccc	0.008			0.20		

Soldering Footprint



Symbol	Inches	Millimeters
C	(0.098)	(2.50)
G	0.055	1.40
P	0.037	0.95
X	0.024	0.60
Y	0.043	1.10
Z	0.141	3.60

Ordering Information

Device	Marking	Package	Quantity	Reel Size
ESDXXV26T-5L	---	SOT-26	3,000pcs/Reel	7 inch