

DESCRIPTION

The LAD92C Series of Transient Voltage Suppressors (TVS) are designed to replace multilayer varistors (MLVS) in portable applications such as cell phones, notebook computers, and PDAs. They offer superior electrical characteristics such as lower clamping voltage and no device degradation when compared to MLVs. They are designed to protect sensitive semiconductor components from damage or upset due to electrostatic discharge (ESD), lightning, electrical fast transients (EFT), and cable discharge events (CDE).

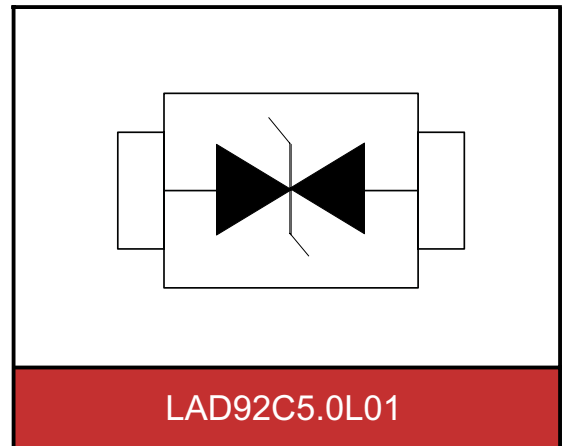


HBM : ±8kV
Air Mode : ±15kV



SPECIFICATION FEATURES

- IEC61000-4-2 ESD 15KV Air,8KV contact compliance
- SOD-923 surface mount package
- Peak power dissipation of 100W under 8/20μs waveform
- Working voltage: 5V
- Low leakage current
- Low operating and clamping voltages
- Solid-state silicon avalanche technology
- Lead Free/RoHS compliant
- Solder reflow temperature: Pure Tin-Sn, 260-270°C
- Flammability rating UL 94V-0



MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Peak pulse power (tp=8/20μs waveform)	Ppp	100	W
IEC61000-4-2(ESD) contact discharge	V _{ESD}	±8	KV
IEC61000-4-2(ESD) air discharge		±15	
Lead solder temperature-maximum (10 second duration)	T _L	260	°C
Junction and Storage temperature range	T _J , T _{STG}	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_J=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse stand-off voltage	V _{RWM}				5	V
Reverse breakdown voltage	V _{BR}	I _{BR} =1mA	5.6		8.0	V
Reverse leakage current	I _R	V _R =5V			1	μA
Clamping voltage (tp=8/20μs)	V _C	I _{PP} =1A			9.8	V
Off state junction capacitance	C _J	0Vdc, f=1MHZ between I/O pins and GND		15		pF

TYPICAL CHARACTERISTICS CURVES

Figure 1. Power Derating Curve

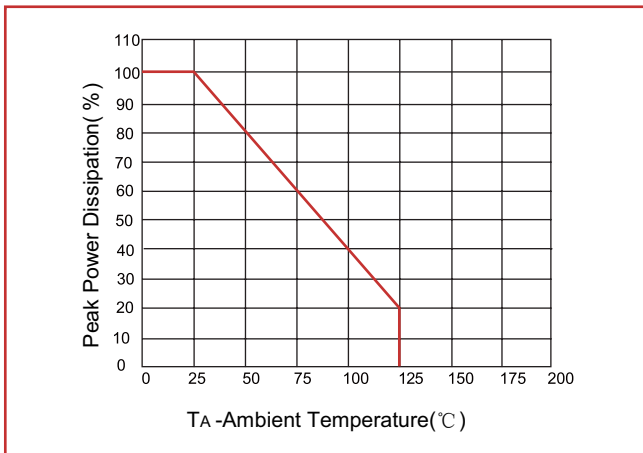


Figure 2. Pulse Waveforms

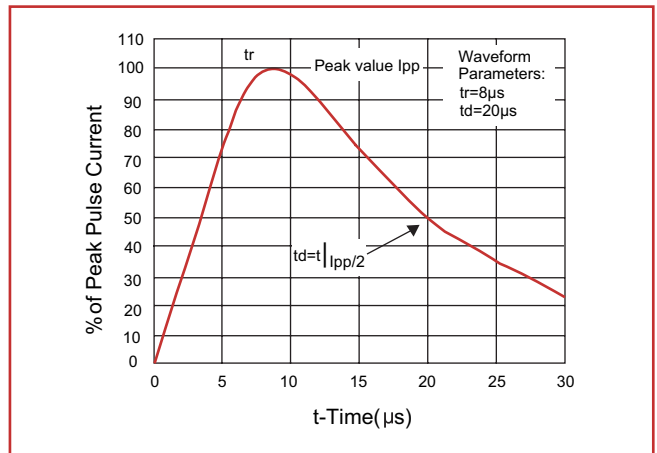


Figure 3. Clamping Voltage vs. Peak Pulse Current

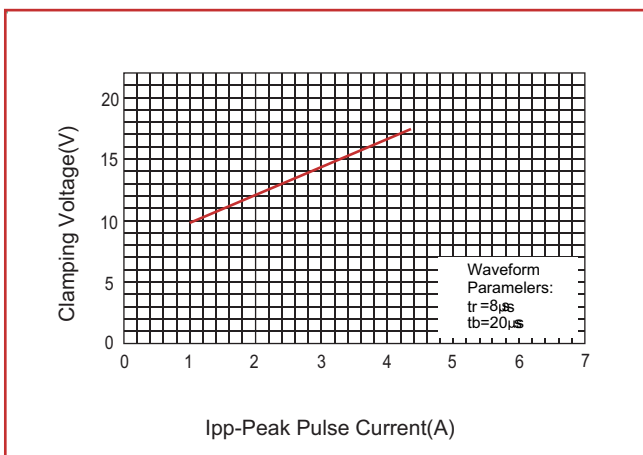
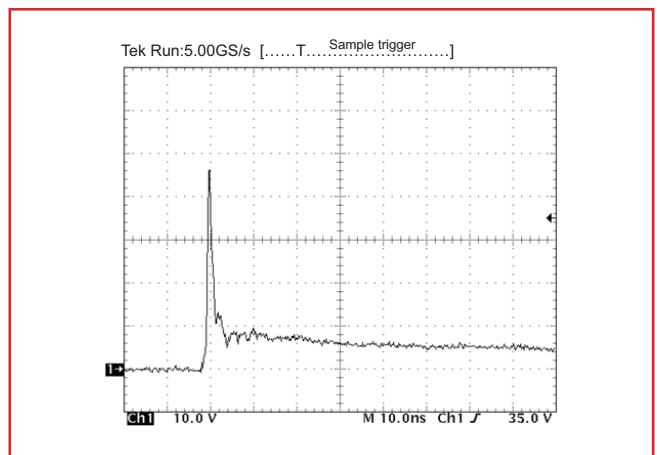
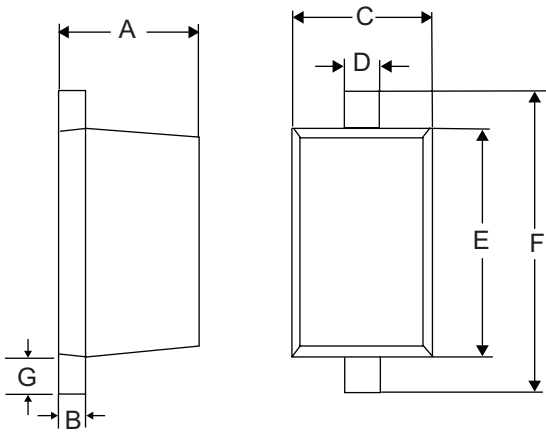


Figure 4. ESD Clamping(8kv Contact IEC61000-4-2)

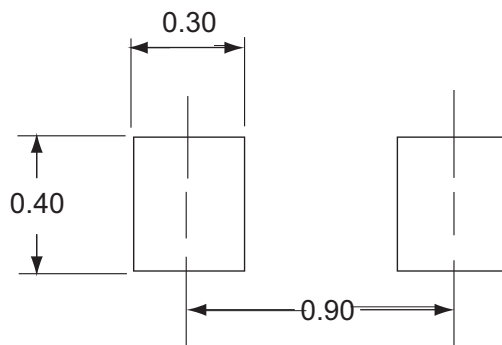


PACKAGE AND SUGGESTED PAD LAYOUT DIMENSION

SOD-923 (unit:mm)



SYMBOL	DIMENSIONS					
	INCHES			MILLIMETERS		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.014	0.016	0.017	0.36	0.40	0.43
B	0.003	0.005	0.007	0.07	0.12	0.17
C	0.022	0.024	0.026	0.55	0.60	0.65
D	0.006	0.008	0.010	0.15	0.20	0.25
E	0.030	0.031	0.033	0.75	0.80	0.85
F	0.037	0.039	0.041	0.95	1.00	1.05
G	0.002	0.004	0.006	0.05	0.10	0.15



单击下面可查看定价，库存，交付和生命周期等信息

[>>Brightking\(君耀电子\)](#)