



Micro Commercial Components



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ESDA6V1L

6.1Volts
ESD Protection
Device

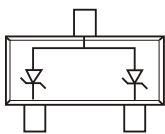
Features

- Dual Transil Array For ESD Protection
2 Unidirectional Transil Functions
Low leakageCurrent: IRmax<20 uA at VWM
300W peak pulse power (8/20 us)
Epoxy meets UL 94 V-0 flammability rating
Moisture Sensitivity Level 1
Halogen free available upon request by adding suffix "-HF"

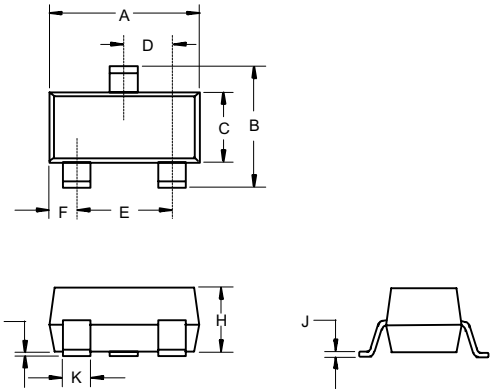
Maximum Ratings

Table with 4 columns: Parameter, Symbol, Limits, unit. Rows include Electrostatic discharge (MIL STD 883C, IEC61000), Peak pulse power, Junction temperature, Storage temperature range, and Maximum lead temperature.

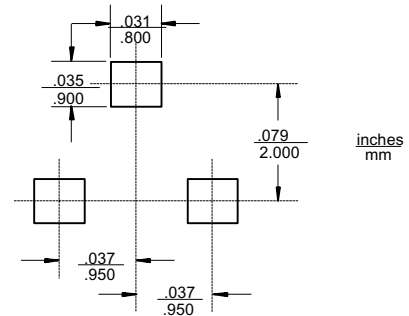
Pin Configuration-Top View



SOT-23



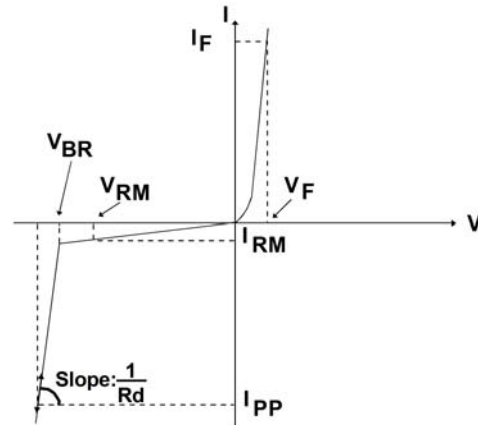
Dimension table with columns for DIM, INCHES (MIN, MAX), MM (MIN, MAX), and NOTE. Lists dimensions A through K with their respective min and max values in inches and mm.



# ESDA6V1L

**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$  unless otherwise noted)

Symbol	Parameter
$V_{WM}$	Stand-off voltage
$V_{BR}$	Breakdown voltage
$V_{CL}$	Clamping voltage
$I_{RM}$	Leakage current
$I_{PP}$	Peak pulse current
$\alpha T$	Voltage temperature coefficient
C	Capacitance
$R_d$	Dynamic resistance
$V_F$	Forward voltage drop



Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Breakdown voltage	$I_R=1.0\text{mA}$	$V_{BR}$	6.1	6.65	7.2	V
Leakage current	$V_{WM}=5.25\text{V}$	$I_R$	-	-	20	$\mu\text{A}$
Capacitance	0V bias	C	-	140	-	pF
Forward voltage drop	$I_F=200\text{mA}$	$V_F$	-	-	1.25	V

# ESDA6V1L

## TYPICAL CHARACTERISTICS

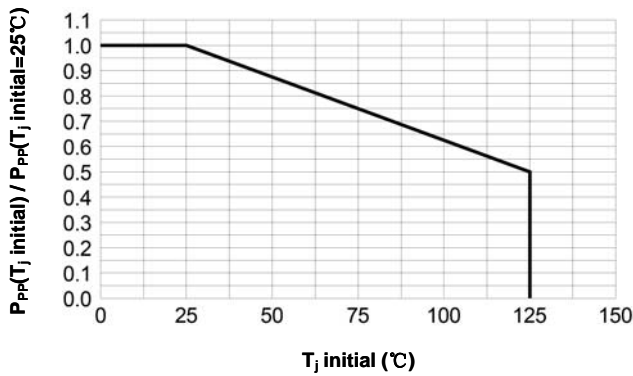


Fig.1: Peak power dissipation vs. initial junction temperature

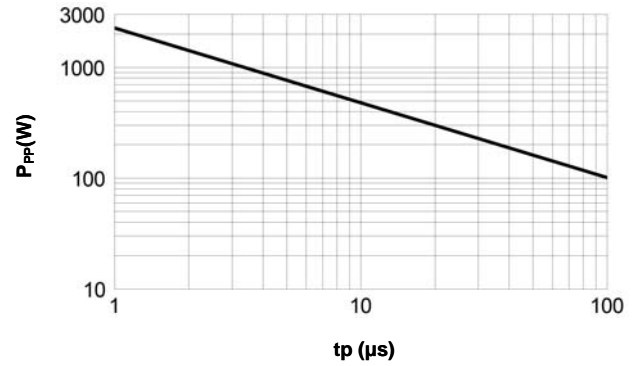


Fig.2: Peak pulse power vs. exponential pulse duration (T<sub>j</sub> initial = 25°C)

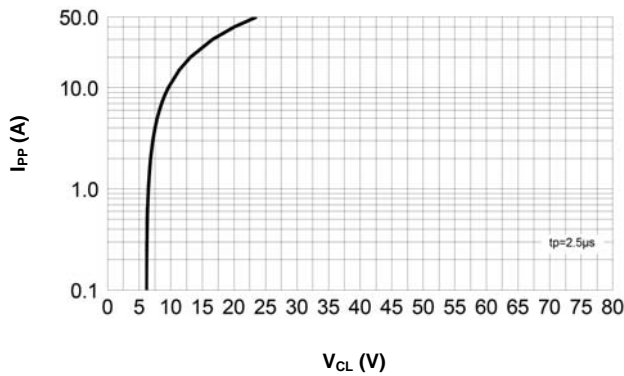


Fig.3: Clamping voltage vs. peak pulse current (T<sub>j</sub> initial = 25°C, rectangular waveform tp = 2.5µs)

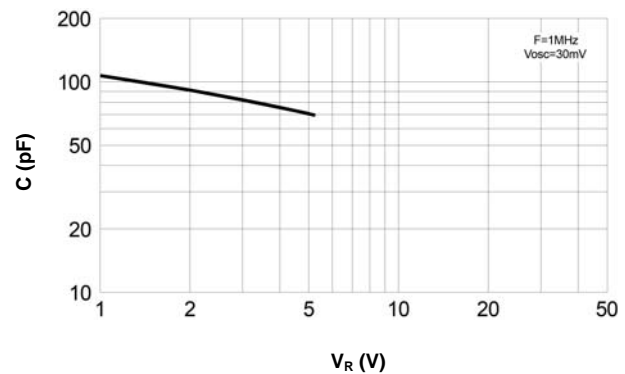


Fig.4: Capacitance vs. reverse applied voltage (typical values)

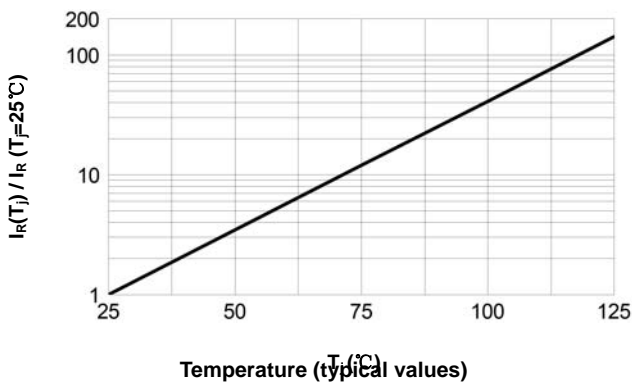


Fig.5: Relative variation of leakage current vs. junction

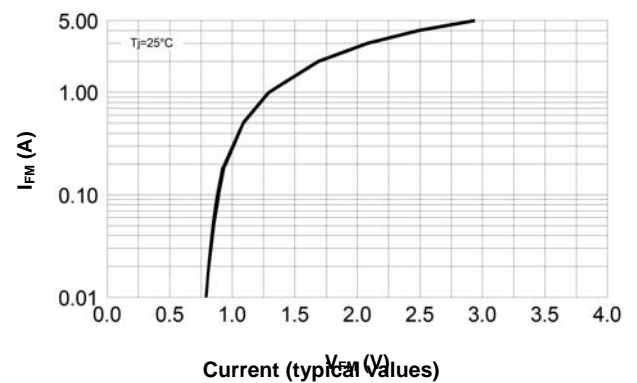


Fig.6: Peak forward voltage drop vs. peak forward



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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