

TVS Diode Array

DESCRIPTION

The ESDA14V2LSeries is designed for applications requiring transient overvoltage protection capability. They are intended for use in voltage and ESD sensitive equipment such as computers, printers, business machines, communication systems, medical equipment and other applications. These devices are ideal for situations where board space is at a premium.

This series has been specifically designed to protect sensitive components which are connected to power, data and transmission lines from overvoltage caused by ESD(electrostatic discharge), CDE (Cable Discharge Events), and EFT (electrical fast transients).

FEATURES

- ♦ IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- ♦IEC61000-4-4 (EFT) 40A (5/50ns)
- ♦350 Watts Peak Pulse Power per (tp=8/20µs)
- Protects one bidirectional line or two unidirectional lines
- ♦ Low clamping voltage
- ♦ Working voltages : 12V
- ♦ Low leakage current

MACHANICAL DATA

- ♦ SOT-23 package
- ♦ Flammability Rating: UL 94V-0
- ♦ Packaging: Tape and Reel
- ♦ High temperature soldering guaranted:260 °C/10s
- ♦ Reel size: 7 inch
- ♦MSL 1

ORDERING INFORMATION

Device: ESDA14V2LPackage: SOT-23Material: Halogen free

♦ Packing: Tape & Reel♦ Quantity per reel: 3,000pcs

APPLICATIONS

- ♦ Cell Phone Handsets and Accessories
- ♦ Microprocessor based equipment
- ♦ Personal Digital Assistants (PDA's)
- ♦ Notebooks, Desktops, and Servers
- ♦ Portable Instrumentation
- ♦ Networking and Telecom
- ♦ Serial and Parallel Ports.
- ♦ Peripherals

PIN CONFIGURATION

3 1 2

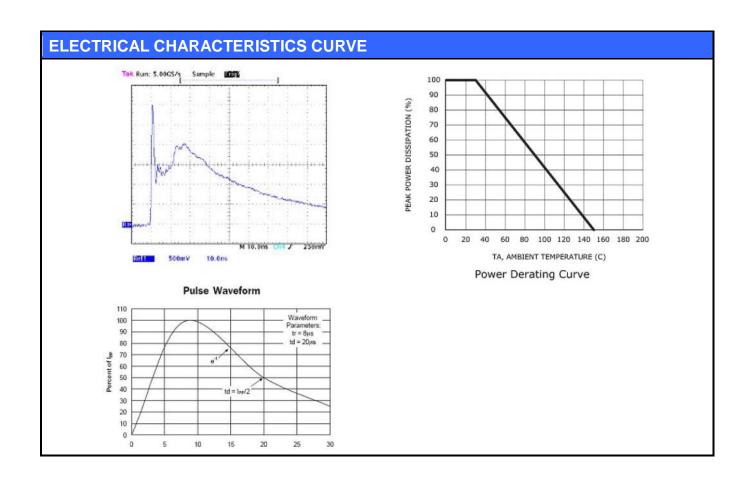
PACKAGE OUTLINE





ABSOLUTE MAXIMUM RATING						
Symbol	Parameter	Value	Units			
V _{ESD}	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	±15 ±8	kV			
P _{PP}	Peak Pulse Power (8/20μs)	350	W			
T _{OPT}	Operating Temperature	-55/+150	°C			
T _{STG}	Storage Temperature	-55/+150	°C			
TL	Lead Soldering Temperature	260 (10 sec.)	°C			

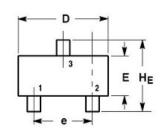
ELECTRICAL CHARACTERISTICS (Tamb=25°C)									
PART NUMBER	DEVICE MARKING	V _{RWM} (V) (max.)	V _B (V) (min.)	I _T (mA)	V _C @1A (V) (max.)	(\text{V} (max.)		l _R (μΑ) (max.)	C _J (pF) (max.)
ESDA14V2L	M12	12	13.3	1	19	32	11	1	130



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SOT-23 PACKAGE OUTLINE DIMENSIONS



	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
Α	0.89	1.00	1.11	0.035	0.040	0.044
A1	0.01	0.06	0.10	0.001	0.002	0.004
b	0.37	0.44	0.50	0.015	0.018	0.020
С	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.90	3.04	0.110	0.114	0.120
E	1.20	1.30	1.40	0.047	0.051	0.055
е	1.78	1.90	2.04	0.070	0.075	0.081
L	0.35	0.54	0.69	0.014	0.021	0.029
HE	2.10	2.40	2.64	0.083	0.094	0.104

