

Description

The ESD3V3AP-TP-CN is designed for applications requiring transient over voltage protection capability. It is intended for use in voltage and ESD sensitive equipment such as computers, printers, business machines, communication systems, medical equipment and other applications. This device is ideal for situations where board space is at a premium.

Package outline



Features

- IEC61000-4-2(ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- IEC61000-4-4(EFT) 40A(5/50 ns)
- 350Watts Peak Pulse Power per (tp=8/20us)
- Protects one bidirectional line or two unidirectional lines
- Low clamping voltage
- Working voltages: 3.3V Low leakage current

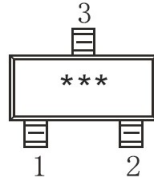
Ordering Information

- Device: ESD3V3AP-TP-CN
- Package: SOT-23
- Material: Halogen free
- Packing: Tape & Reel
- Quantity per reel: 3,000pcs

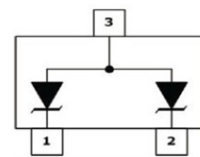
Mechanical Data

- SOT-23 Package
- Flammability Rating: UL 94V-0
- High temperature soldering guaranteed: 260°C/10s

Marking code



Pin Configuration

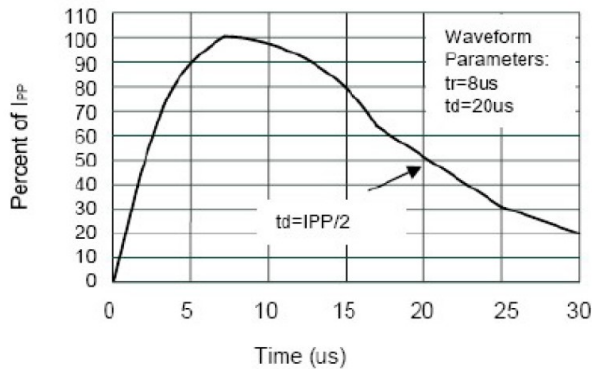
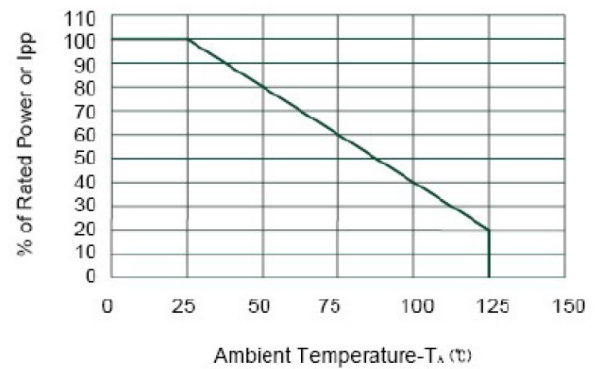
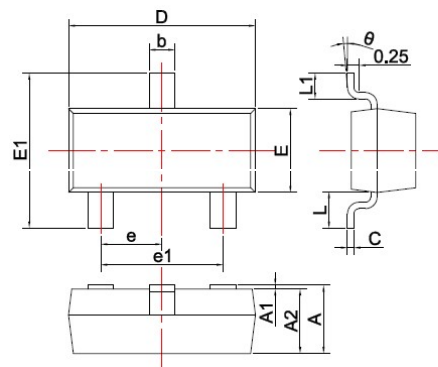


ABSOLUTE MAXIMUM RATING

Parameters	Symbol	Value	Unit
ESD per IEC 61000-4-2(Air)	VESD	± 15	KV
ESD per IEC 61000-4-2(Contact)		± 8	
Peak Pulse Power (8/20us)	PPP	350	W
Operating temperature	TOPT	-55-+150	°C
Storage temperature range	TSTG	-55-+150	°C
Forward Voltage@100mA, s00us-square wave (Applies to unidirectional pins only)	VF	1.5	V

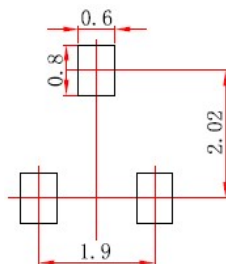
Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

PART NUMBER (Note 1)	DEVICE MARKING	VRWM (V) (max.)	VB (V) (min.)	IT (mA)	Vc@1A (V) (max.)	Vc (V) (max.) (@A)	IR (uA) (max.)	CT (pF) (max.)
ESD3V3AP-TP-CN	M03	3.3	4	1	7	10.5 20	40	450

ELECTRICAL CHARACTERISTICS CURVE

Pulse Waveform

Power Derating Curve
SOT-23 PACKAGE OUTLINE Plastic surface mounted package


SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950TYP	
e1	1.800	2.000
L	0.550REF	
L1	0.300	0.500
θ	0°	8°

Unit: mm

焊盘设计参考Precautions: PCB Design(Recommended land dimensions for SOT-23 diode. Electrode patterns for PCBs)


Note:

1. Controlling dimension: In millimeters.
2. General tolerance: $\pm 0.05mm$.
3. The pad layout is for reference purposes only.

NOTICE

The information presented in this document is for reference only. Involving product optimization and productivity improvement, ChipNobo reserves the right to adjust product indicators and upgrade some technical parameters. ChipNobo is entitled to be exempted from liability for any delay or non-delivery of the information disclosure process that occurs.

本文件中提供的信息仅供参考。涉及产品优化和生产效率改善，ChipNobo 有权调整产品指标和部分技术参数的升级，所出现信息披露过程存在延后或者不能送达的情形，ChipNobo 有获免责权。

The product listed herein is designed to be used with residential and commercial equipment, and do not support sensitive items and specialized equipment in areas where sanctions do exist. ChipNobo Co., Ltd or anyone on its behalf, assumes no responsibility or liability for any damages resulting from improper use.

此处列出的产品旨在民用和商业设备上使用，不支持确有制裁地区的敏感项目和特殊设备，ChipNobo 有限公司或其代表，对因不当使用而造成的任何损害不承担任何责任。

For additional information, please visit our website <http://www.chipnobo.com>, or consult your nearest Chipnobo sales office for further assistance.

欲了解更多信息，请访问我们的网站 <http://www.chipnobo.com>，或咨询离您最近的 Chipnobo 销售办事处以获得进一步帮助。