

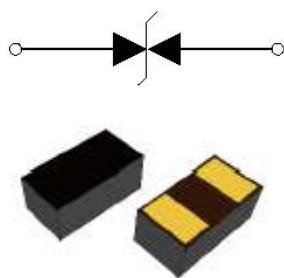
Features

- 24V Working Peak Reverse Voltage
- ESD per IEC 61000-4-2(Contact):8KV
- ESD per IEC 61000-4-2(Air):15KV
- Clamping Voltage @IEC61000-4-2 8KV:40V
- Junction Capacitance:0.05PF
- Package:(0603)
- Polarity: Bidirectional

Main Applications

- Smart phone/Mobile internet device.
- Laptop/Desktop computer.
- Antennas(Cell phone,GPS...)
- USB 3.0,USB 3.1 and high speed interface.

Schematic And Configuration



Ordering Information

Part Number	Packaging	Reel Size
TEPC0R05V24B1X	5K/Tape & Reel	7inch

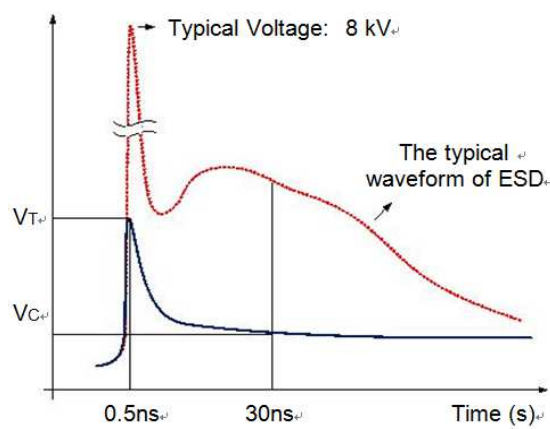
Absolute Maximum Ratings (Ta=25°C,RH=45%-75%,unless otherwise noted)

Parameter	Symbol	Value	Unit
Operating Temperature Range	Tj	-55~+125	°C
Storage Temperature Range	Tstg	-55~+85	°C

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Min	Type	Max	Unit	Test Condition
Reverse Working Voltage	Vrwm			24	V	
Trigger Voltage	Vt	450			V	IEC61000-4-2Contact 8KV
Reverse Leakage Current	Ir		10		nA	Vrwm=24V
Clamping Voltage	Vc		40		V	IEC61000-4-2Contact 8KV
Junction Capacitance	Cj		0.05		pF	f=10MHz
ESD pulse withstand	Pulses	1000				IEC61000-4-2Contact 8KV

Typical Performance Characteristics(Ta=25°C,unless otherwise noted)



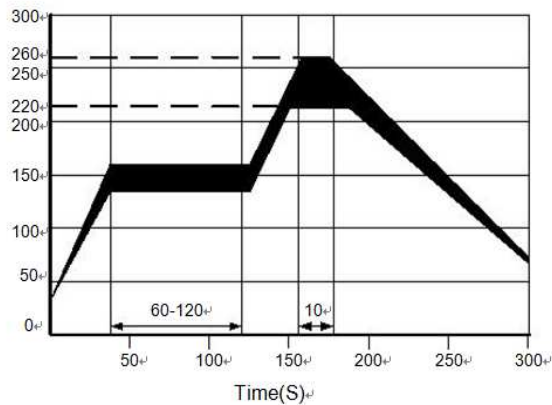
IEC61000-4-2 Standards

Level	First Peak Current (A)	Peak Current at 30 ns (A)	Peak Current at 60 ns (A)	Test Voltage (Contact Discharge) (kV)	Test Voltage (Air Discharge) (kV)
1	7.5	4	2	2	2
2	15	8	4	4	4
3	22.5	12	6	6	8
4	30	16	8	8	15

Environmental Specifications

High temperature storage: 150°C, 1000 hours without load.
Temperature cycle: The temperature cycle shall be repeated for five times, -40°C/ 30 min; room temperature/ 1~2 hours; 125°C/ 30 min; room temperature/ 1~2 hours.
High temperature load: 85°C, 1000 hours with the maximum allowable voltage.
Humidity load: 40°C, 90 to 95% RH environment, the maximum allowable voltage applied for 1000 hours.
Low temperature storage: -40°C, 500 hours without load.
After being test, all the specimen should be stored at room temperature 1~2 hours, the change of voltage shall be within 10% .

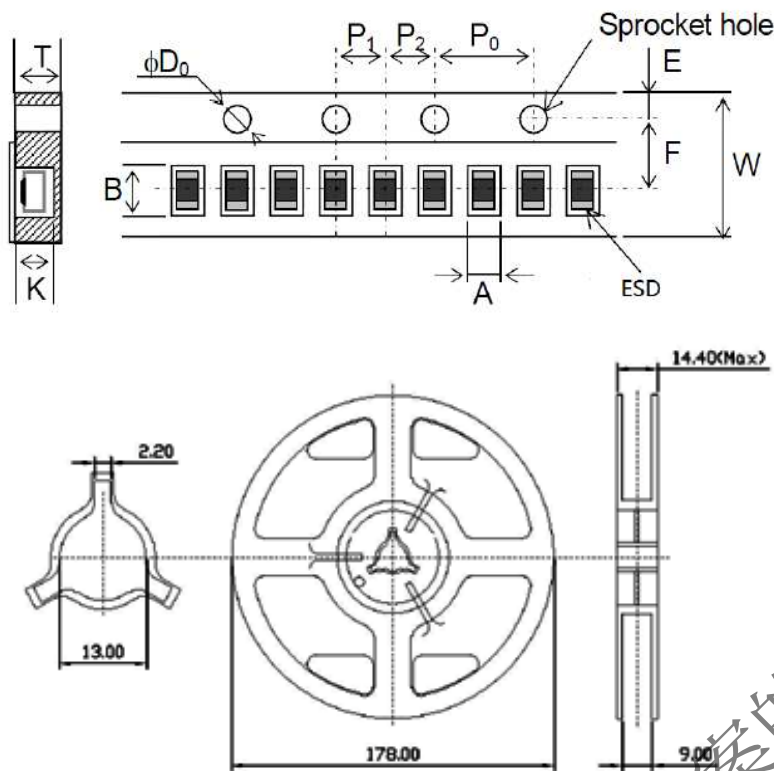
Soldering Parameters



Recommended reflow methods: IR, vapor phase oven, hot air oven.
The device can be exposed to a maximum temperature of 260°C for 10 seconds.
Devices can be cleaned using standard industry methods and solvents.

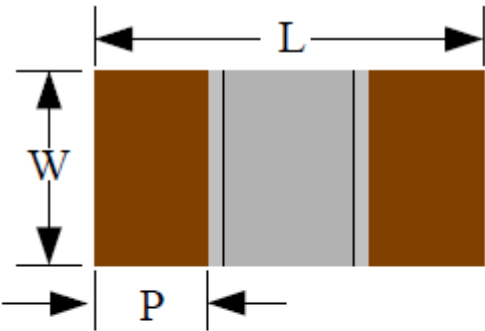
Notes: If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Tape And Reel Information



Symbol	Millimeters	Inches
A	1.00±0.03	0.039±0.001
B	1.90±0.03	0.075±0.001
W	8.00±0.10	0.315±0.004
F	3.50±0.05	0.138±0.002
E	1.75±0.10	0.069±0.004
P1	2.00±0.05	0.079±0.002
P2	2.00±0.05	0.079±0.002
P0	4.00±0.10	0.157±0.004
ΦD0	1.55±0.05	0.061±0.002
K	0.43±0.03	0.017±0.001
T	0.43±0.03	0.017±0.001

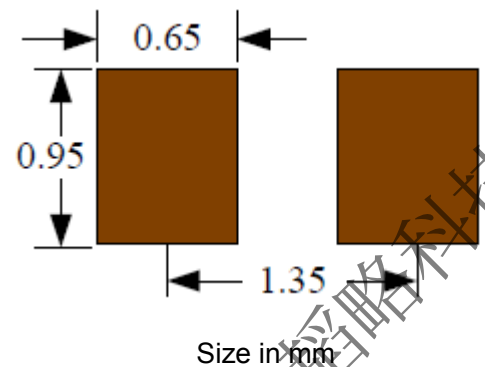
Package Mechanical Data



Symbol	Millimeters		
	Min.	Typ.	Max.
L	1.45	1.60	1.75
W	0.70	0.83	0.95
P	0.20	0.35	0.50
H	0.26	0.36	0.46



Suggested Land Pattern



Contact Information

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