



VOLTAGE

5.0 Volts

**POWER** 

200 Watts

# ULTRA LOW CAPACITANCE DUAL TRANSIET VOLTAGE SUPPRESSOR FOR HIGH SPEEDDATA LINES

This transient overvoltage suppressor is intended to protect sensitive equipment against electrostatic discharge events as well to offer a minimum insertion loss in data transmission lines in communications ports used in portable consumer, computing and networking applications. This dual transient voltage suppressor comes in a single SOT-523, offering board space reduction, where the application requires it.

This device comes with two pairs of high speed switching diodes connected in series, where both pairs are electrically isolated, offering a very low capacitance, minimizing the insertion losses in data transmission lines.

#### **FEATURES**

- Maximum capacitance @ 0 Vdc Bias of 1.0 pF between terminals 1-3 or terminals 2-3
- IEC61000-4-2 esd 15kV Air, 8kV contact compliance
- Lead free in comply with EU RoHS 2002/95/EC directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### **MECHANICAL DATA**

· Case: SOT-523, plastic

• Terminals: solderable per MIL-STD-750, Method 2026

· Approx. Weight: 0.00007ounces, 0.002 grams

• Marking : M7

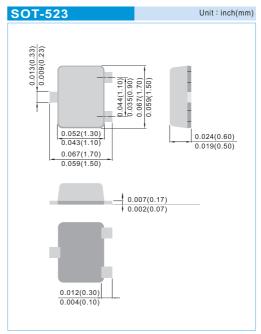




Fig.21

#### **MAXIMUM RATINGS**

PARAMETER	SYMBOL	VALUE	UNITS
Operating Junction		-55 to +150	°C
Storage Temperature Range	Тѕтс	-55 to +150	°C

#### **ELECTRICAL CHARACTERISTICS**

PARAMETER	SYMBOL	CONDITIONS	Min.	Тур.	Max.	UNITS
Reverse Stand-Off Voltage	V <sub>RWM</sub>	-	-	-	5	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>T</sub> =1mA	6	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> = 5V, T <sub>J</sub> = 25°C	-	-	20	μΑ
Junction Capacitance	CJ	Between pin1.2 to 3 V <sub>R</sub> =0V,f=1MHz	-	-	1.0	pF
Peak Pulse Current	I <sub>pp</sub>	t <sub>P</sub> =8/20 μsec	-	-	10	А
Max .Clamping Voltage	V <sub>c</sub>	t <sub>P</sub> =8/20 μsec	-	-	20.5	V

PAN JIT RESERVES THE RIGHT TO CHANGE THE SPECIFICATION ANY TIME WITHOUT NOTICE IN ORDER TO IMPROVE THE DESIGN AND SUPPLY THE BEST POSSIBLE PRODUCT.





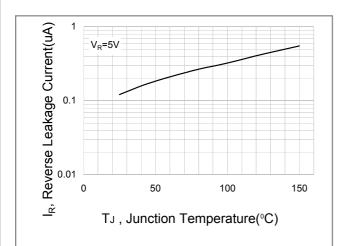
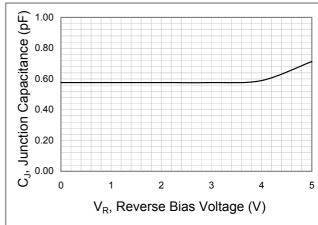
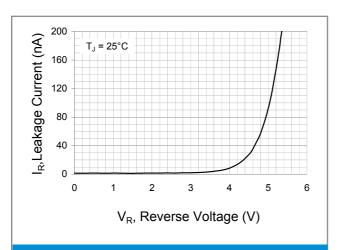


Fig.1 TYPICAL LEAKAGE CURRENT JUNCTION TEMPERATURE



**Fig.2Typical Junction Capacitance** 



**Fig.3 Typical Reverse Characteristics** 

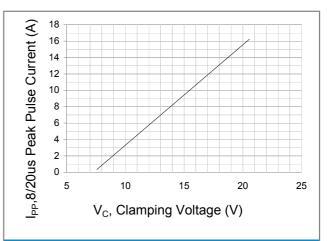
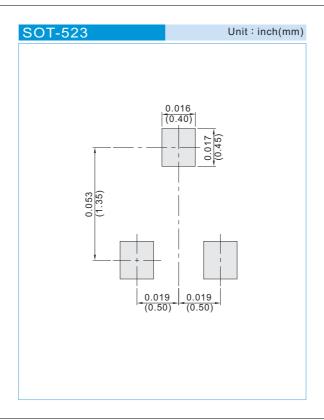


Fig.4 Typical Peak Clamping Voltage





#### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

Packing information

T/R - 4K per 7" plastic Reel

## LEGAL STATEMENT

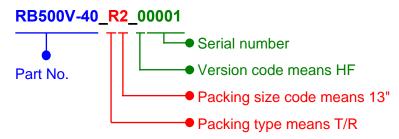
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## For example:



Part No\_packing code\_Version

PJDLC05C-02TB\_R1\_00001 PJDLC05C-02TB\_R1\_10001

Packing Code XX			Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
T/B	Α	N/A	0	HF	0	serial number
T/R	R	7"	1	RoHS	1	serial number
B/P	В	13"	2			
T/P	T	26mm	X			
TRR	S	52mm	Y			
TRL	L	PBCU	U			
FORMING	F	PBCD	D			

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