



PJDLC05C-05

VOLTAGE

5 Volt

POWER

400 Watt

SOT-23

Unit : inch(mm)

ULTRA LOW CAPACITANCE DUAL TRANSIENT VOLTAGE SUPPRESSOR FOR HIGH SPEED DATA 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-23, 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 pF between terminals 1-3 or terminals 2-3
- IEC61000-4-2 esd 15kV Air, 8kV contact compliance
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOT-23, plastic
- Terminals: solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0003 ounce, 0.0084 gram
- Marking: DEA

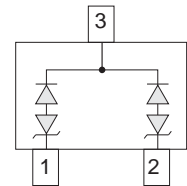
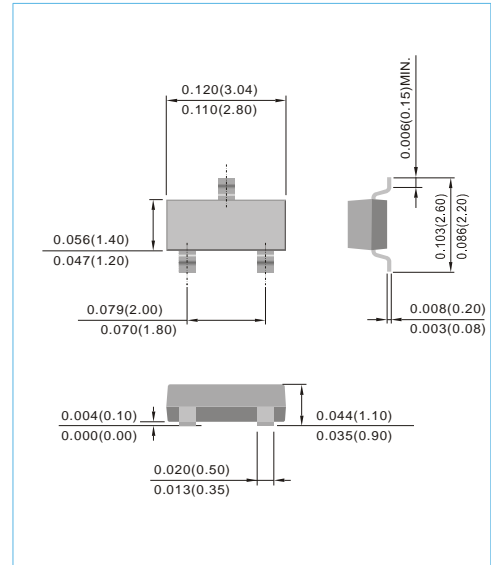


Fig.21

MAXIMUM RATINGS

Parameter	Symbol	Value	Units
Operating Junction	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V _{RWM}	-	-	-	5	V
Reverse Breakdown Voltage	V _{BR}	I _T =1mA	6	-	-	V
Reverse Leakage Current	I _R	V _{RWM} = 5V, T = 25°C	-	0.8	1.2	µA
Junction Capacitance	C _J	Between pin1,2 to 3 V _R =0V,f=1MHz	-	-	1	pF
Peak Pulse Current	I _{PP}	t _p =8/20 µsec	-	-	17	A
Clamping Voltage	V _C	t _p =8/20 µsec @1A	-	-	9.5	V
Clamping Voltage	V _C	t _p =8/20 µsec @5A	-	-	12	V



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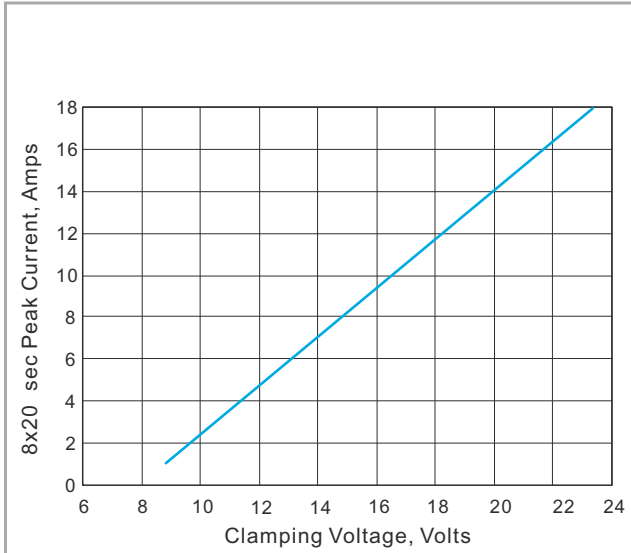


Fig 1- Clamping Voltage vs Ipp 8x20 sec

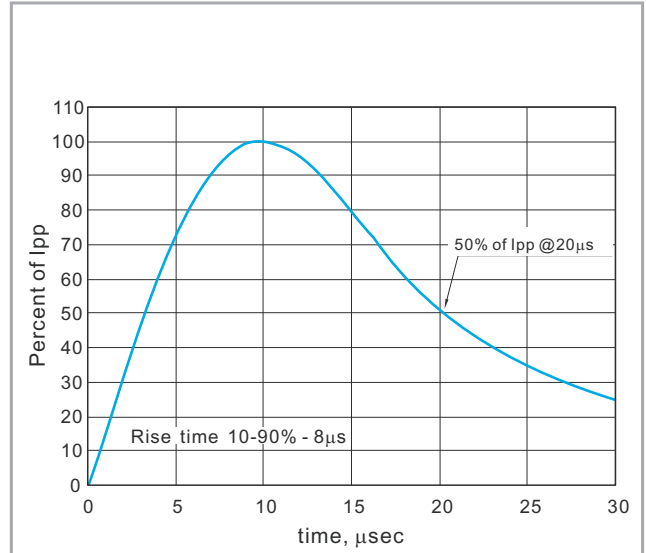


Fig 2- Pulse Waveform

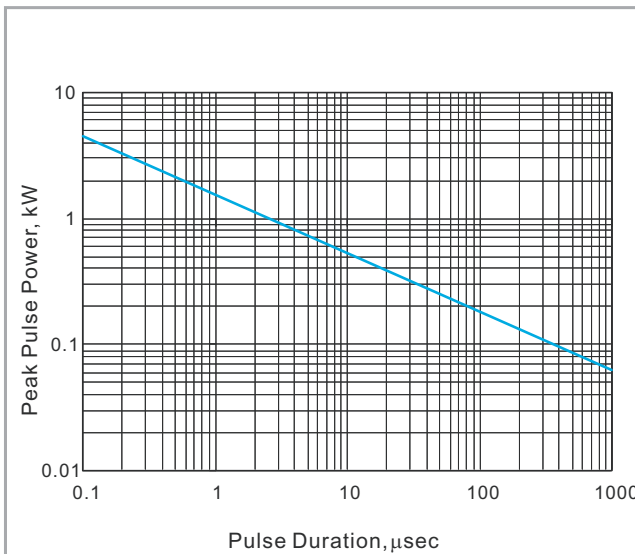


Fig 3- Non-Repetitive Peak Pulse Power vs Pulse Time

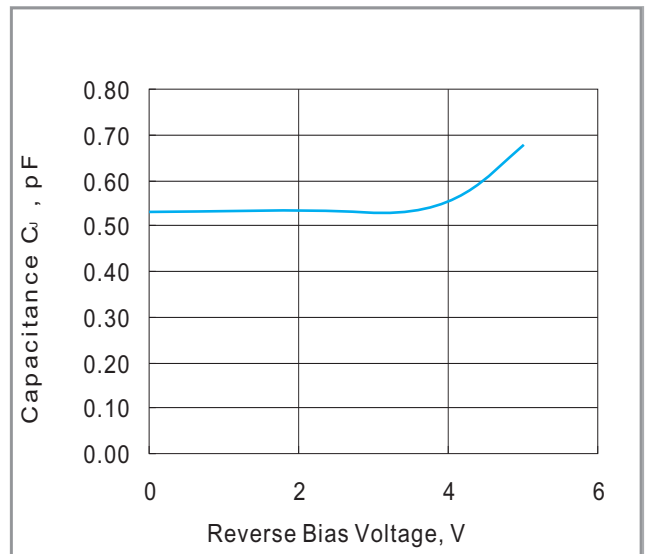


FIG.4- TYPICAL JUNCTION CAPACITANCE UNDER BIAS

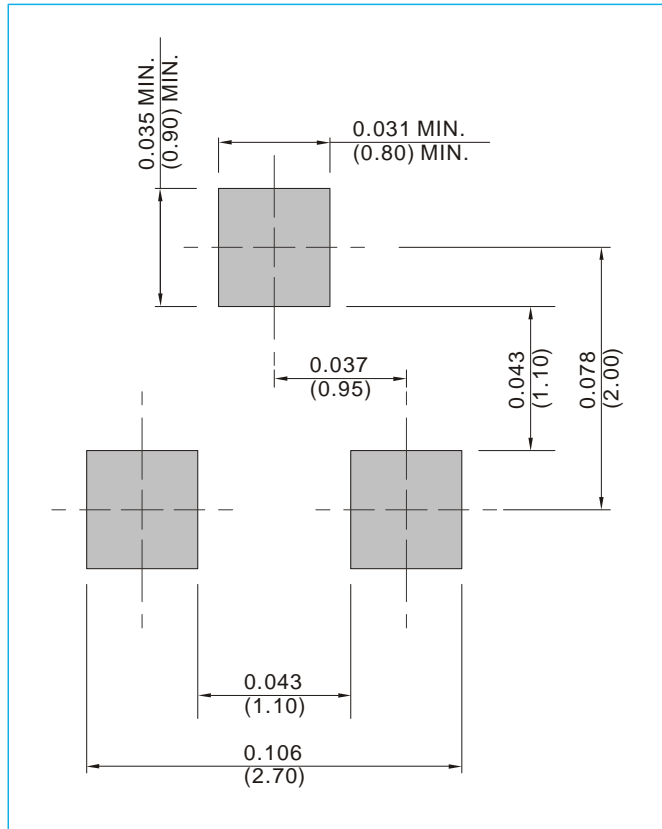


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MOUNTING PAD LAYOUT

SOT-23

Unit : inch(mm)



ORDER INFORMATION

- Packing information
 - T/R - 12K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel



PJDLC05C-05

Part No_packing code_Version

PJDLC05C-05_R1_00001

PJDLC05C-05_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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