PJDLC03~PJDLC24

VOLTAGE 3.3 to 24 Volts **POWER** 400 Watts

ULTRA LOW CAPACITANCE DUAL TRANSIET VOLTAGE SUPPRESSOR FOR HIGH SPEED DATA LINES

This transient overvoltage suppressor is intended to prodect sensitive equipment againset electrostatic discharge events as well to offer a minmum Insertion loss in data transmission lines in communications ports used in portable consumer, computing and networking applicatons. This dual transient voltage suppressor comes in a single SOT-23, offering borard space reduction, where the application requires it.

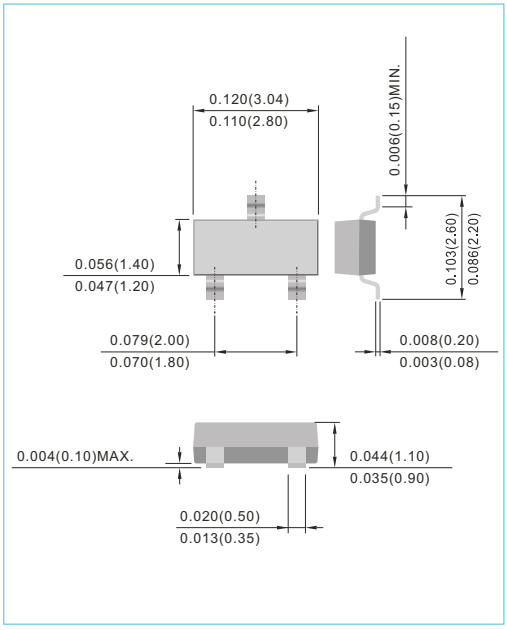
FEATURES

- Maximum capacitance @ 0 Vdc Bias of 1.2 pF between terminals 1-3 or terminals 2-3
- IEC61000-4-2 esd 15kV Air, 8kV contact compliance
- In compliance with EU RoHS 2002/95/EC directives

MECHANICALDATA

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

SOT-23 Unit : inch(mm)



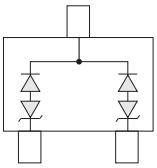


Fig.21

MAXIMUM RATINGS

Parameter	Symbol	Value	Units
Operating Junction	T_J	-55 to +125	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

PJDLC03 Marking DL3

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	3.3	V
Reverse Breakdown Voltage	V_{BR}	I_T=1mA	4	-	-	V
Reverse Leakage Current	I_R	V_{RWM} = 3.3V, T = 25°C	-	-	50	μA
Clamping Voltage	V_C	I_{PP} = 1A, t_p = 8/20 μs	-	-	6.5	V
Clamping Voltage	V_C	I_{PP} = 5A, t_p = 8/20 μs	-	-	8	V
Junction Capacitance	C_J	Between pin1.2 to 3 V_R=0V,f=1MHz	-	-	1.2	pF

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PJDLC05 Makring T2S						
Parameter	Symbol	Conditions	Min.	Typ.	Max.	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	-	-	20	μA
Clamping Voltage	V_C	I_{PP} = 1A t_p = 8/20 μs	-	-	9.8	V
Clamping Voltage	V_C	I_{PP} = 5A t_p = 8/20 μs	-	-	11	V
Junction Capacitance	C_J	Between pin1.2 to 3 V_R=0V,f=1MHz	-	-	1.0	pF

PJDLC12 Makring DJ2						
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	12	V
Reverse Breakdown Voltage	V_{BR}	I_T=1mA	13.3	-	-	V
Reverse Leakage Current	I_R	V_{RWM} = 12V, T = 25°C	-	-	1	μA
Clamping Voltage	V_C	I_{PP} = 1A t_p = 8/20 μs	-	-	19	V
Clamping Voltage	V_C	I_{PP} = 5A t_p = 8/20 μs	-	-	24	V
Junction Capacitance	C_J	Between pin1.2 to 3 V_R=0V,f=1MHz	-	-	1.0	pF

PJDLC15 Makring DJ5						
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	15	V
Reverse Breakdown Voltage	V_{BR}	I_T=1mA	16.7	-	-	V
Reverse Leakage Current	I_R	V_{RWM} = 15V, T = 25°C	-	-	1	μA
Clamping Voltage	V_C	I_{PP} = 1A t_p = 8/20 μs	-	-	24	V
Clamping Voltage	V_C	I_{PP} = 5A t_p = 8/20 μs	-	-	30	V
Junction Capacitance	C_J	Between pin1.2 to 3 V_R=0V,f=1MHz	-	-	1.2	pF

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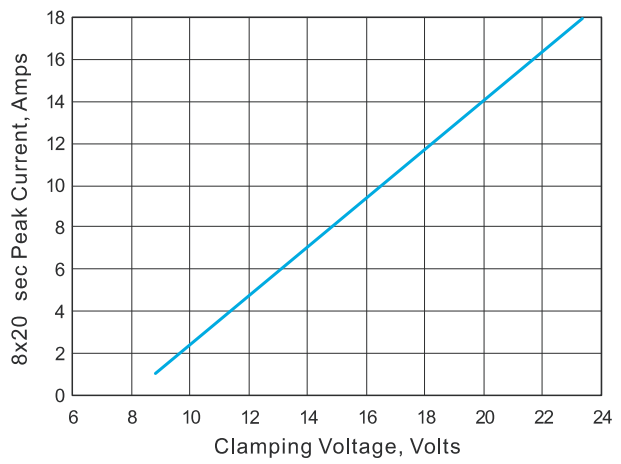
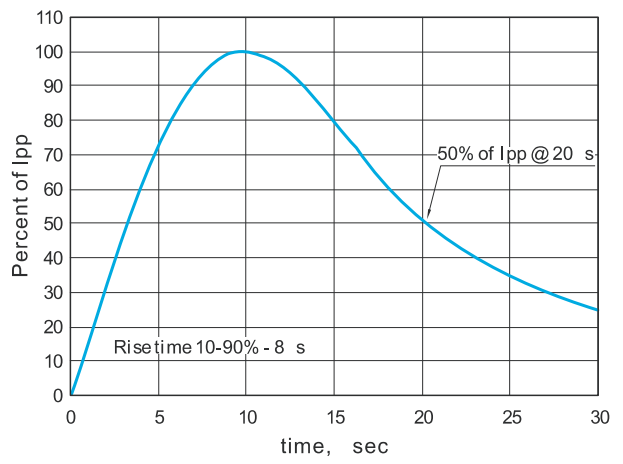
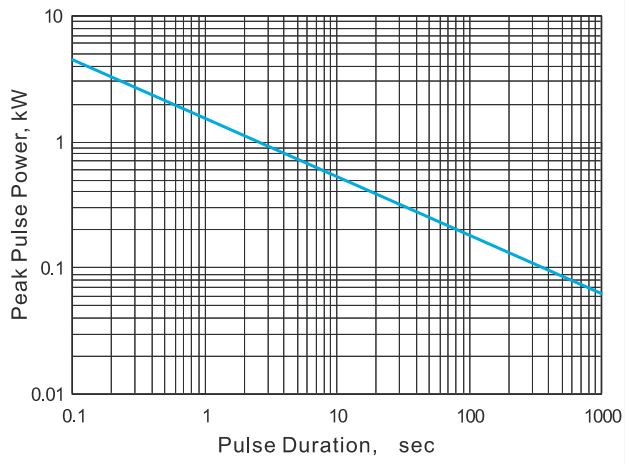
PJDLC24 Marking DJ4						
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V_{RWM}	-	-	-	24	V
Reverse Breakdown Voltage	V_{BR}	I_T=1mA	26.7	-	-	V
Reverse Leakage Current	I_R	V_{RWM} = 24V, T = 25°C	-	-	1	μA
Clamping Voltage	V_C	I_{PP} = 1A t_p = 8/20 μs	-	-	43	V
Clamping Voltage	V_C	I_{PP} = 5A t_p = 8/20 μs	-	-	55	V
Junction Capacitance	C_J	Between Pin 1.2 to 3 V_R = 0V, f = 1MHz	-	-	1.0	pF



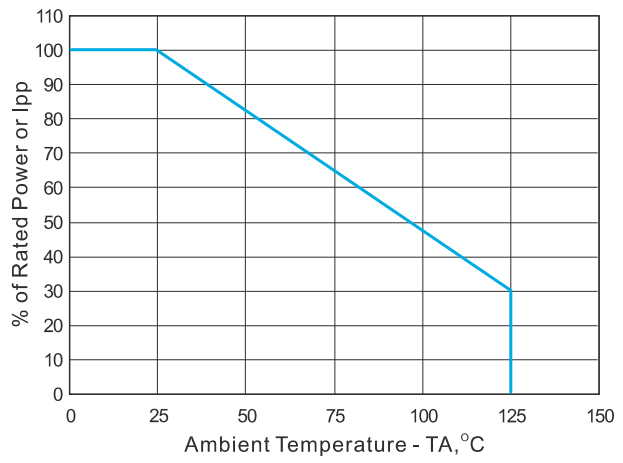
Clamping Voltage vs Ipp 8x20 sec



Pulse Waveform



Non-Repetitive Peak Pulse Power vs Pulse Time



Power Derating Curve

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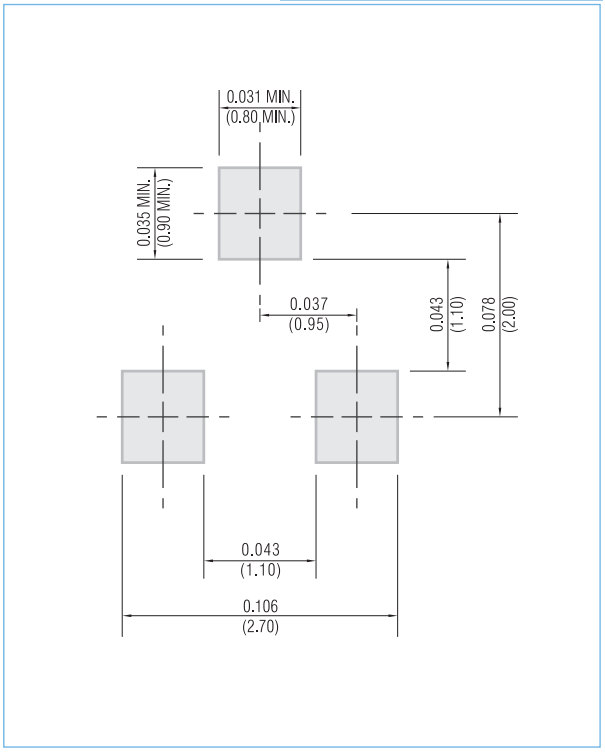
MOUNTING PAD LAYOUT

SOT-23 Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 12K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

LEGAL STATEMENT