



# PJDLC03~PJDLC24

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

**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.

### 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

### MECHANICAL DATA

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

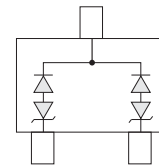
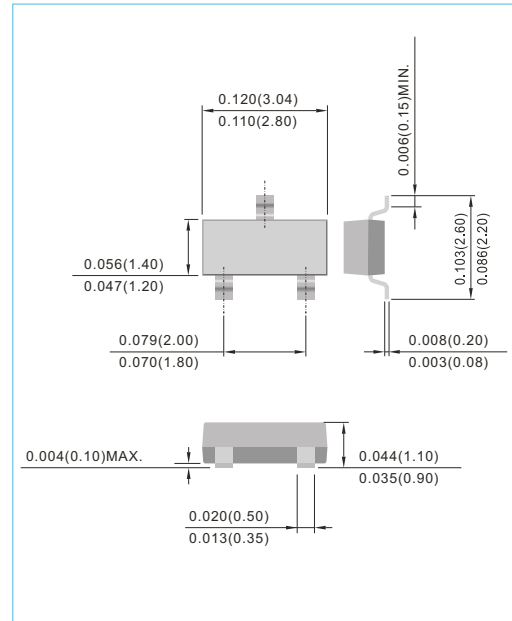


Fig.21

### MAXIMUM RATINGS

Parameter	Symbol	Value	Units
Operating Junction	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

### ELECTRICAL CHARACTERISTICS

PJDLC03 Marking DL3						
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	V <sub>RWM</sub>	-	-	-	3.3	V
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>T</sub> =1mA	4	-	-	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> = 3.3V, T = 25°C	-	-	50	μA
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> = 1A t <sub>p</sub> = 8/20 μs	-	-	6.5	V
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> = 5A t <sub>p</sub> = 8/20 μs	-	-	8	V
Junction Capacitance	C <sub>J</sub>	Between pin1,2 to 3 V <sub>R</sub> =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	$I_R$	$V_{RWM} = 5V,$ $T = 25^{\circ}C$	-	-	20	$\mu A$
Clamping Voltage	$V_C$	$I_{PP} = 1A$ $t_p = 8/20 \mu s$	-	-	9.8	V
Clamping Voltage	$V_C$	$I_{PP} = 5A$ $t_p = 8/20 \mu s$	-	-	11	V
Junction Capacitance	$C_J$	Between pin1.2 to 3 $V_R=0V, f=1MHz$	-	-	0.65	pF

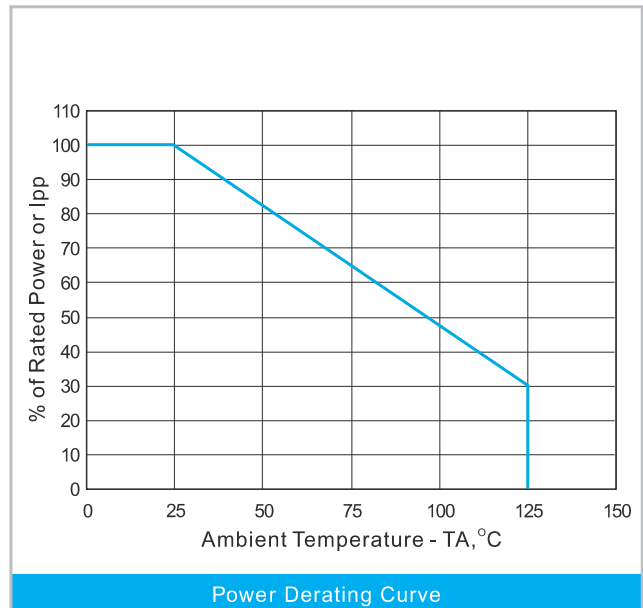
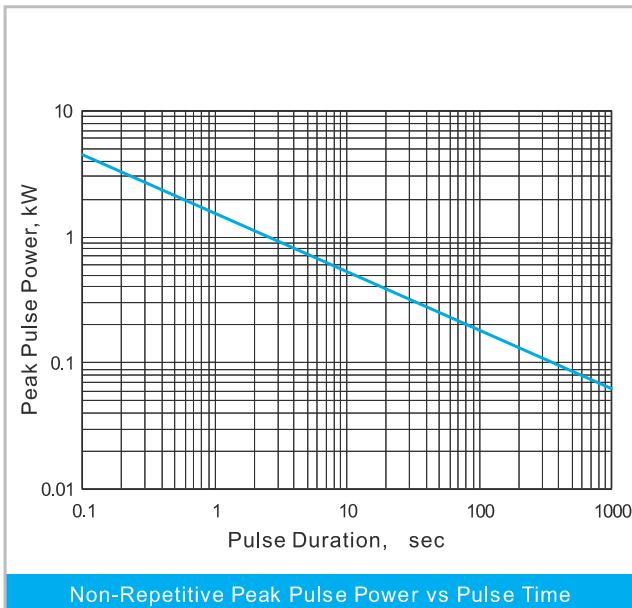
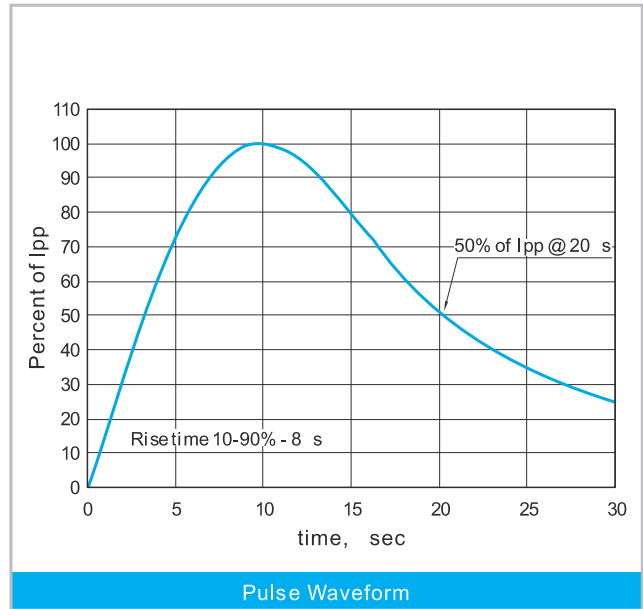
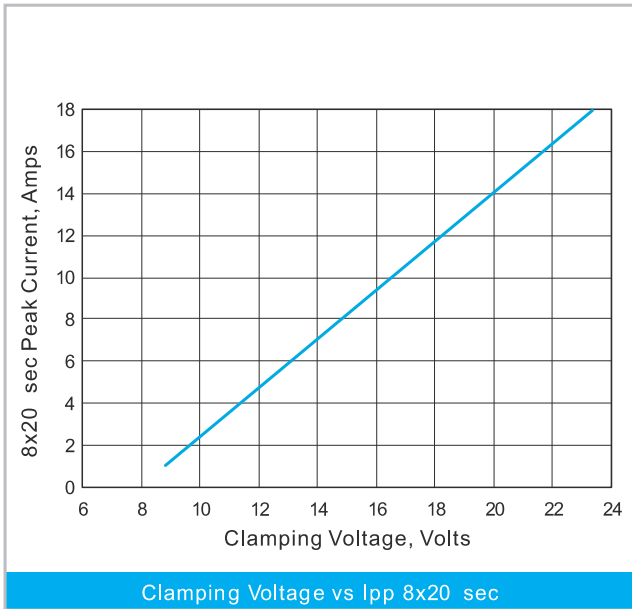
PJDLC12 Makring DJ2						
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	12	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	13.3	-	-	V
Reverse Leakage Current	$I_R$	$V_{RWM} = 12V,$ $T = 25^{\circ}C$	-	-	1	$\mu A$
Clamping Voltage	$V_C$	$I_{PP} = 1A$ $t_p = 8/20 \mu s$	-	-	19	V
Clamping Voltage	$V_C$	$I_{PP} = 5A$ $t_p = 8/20 \mu s$	-	-	24	V
Junction Capacitance	$C_J$	Between pin1.2 to 3 $V_R=0V, f=1MHz$	-	-	1.2	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	$I_R$	$V_{RWM} = 15V,$ $T = 25^{\circ}C$	-	-	1	$\mu A$
Clamping Voltage	$V_C$	$I_{PP} = 1A$ $t_p = 8/20 \mu s$	-	-	24	V
Clamping Voltage	$V_C$	$I_{PP} = 5A$ $t_p = 8/20 \mu s$	-	-	30	V
Junction Capacitance	$C_J$	Between pin1.2 to 3 $V_R=0V, f=1MHz$	-	-	1.2	pF



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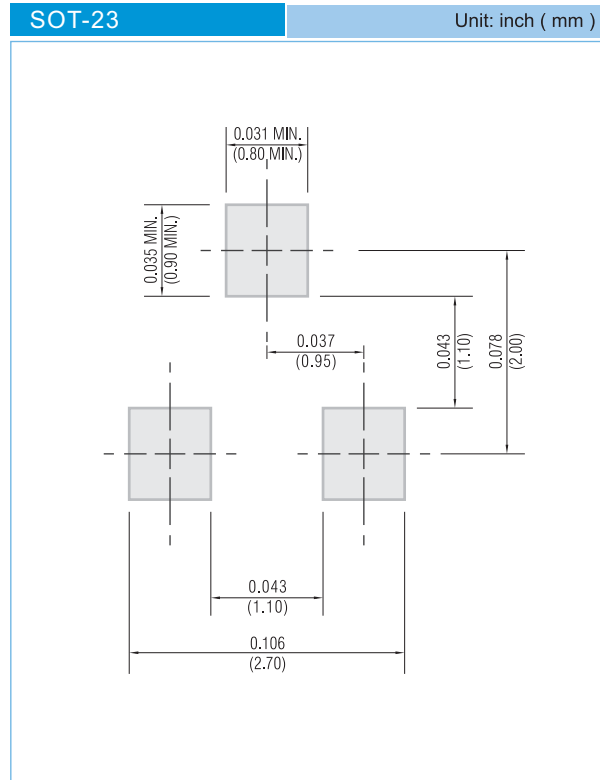
PJDLC24 Marking DJ4						
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-Off Voltage	$V_{RWM}$	-	-	-	24	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	26.7	-	-	V
Reverse Leakage Current	$I_R$	$V_{RWM} = 24V,$ $T = 25^{\circ}C$	-	-	1	$\mu A$
Clamping Voltage	$V_C$	$I_{PP} = 1A$ $t_p = 8/20 \mu s$	-	-	43	V
Clamping Voltage	$V_C$	$I_{PP} = 5A$ $t_p = 8/20 \mu s$	-	-	55	V
Junction Capacitance	$C_J$	Between Pin 1,2 to 3 $V_R = 0V, f = 1MHz$	-	-	1.2	pF





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## MOUNTING PAD LAYOUT



### ORDER INFORMATION

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

### LEGAL STATEMENT

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