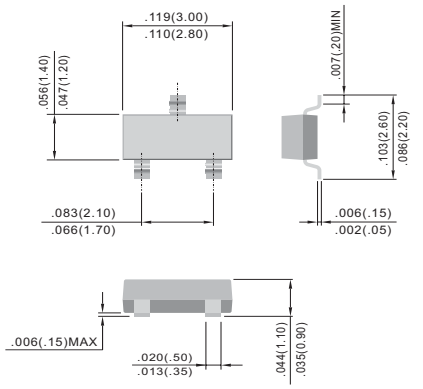
PJDLC05~PJDLC24

VOLTAGE 5 to 24 Volts **WATT** 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.

SOT-23 Unit: inch (mm)



FEATURES

- Improved leakage current, maximum of 5 µA @ 5Vdc
- 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
- IEC61000-4-5 lightning 17 Amps peak, 8x20 usec waveform
- Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

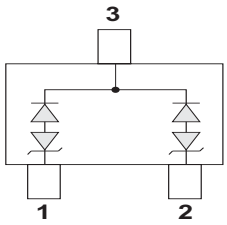
MECHANICALDATA

Case: SOT-23, plastic

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

Appox. Weight : 8mg

Marking : PJDLC05 : T2S
PJDLC12 : DJ2
PJDLC15 : DJ5
PJDLC24 : DJ4



MAXIMUM RATINGS

PJDLC05						
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			20	µA
Clamping Voltage	V_C	I_{PP} = 1A t_p = 8/20 µS			9.8	A
Clamping Voltage	V_C	I_{PP} = 5A t_p = 8/20 µS			11	V
Peak Pulse Current	I_{PP}	t_p = 8/20 µS			17	A
Junction Capacitance	C_J	Pin 1 to 2 V_R = 0V, f = 1MHZ			5	pF

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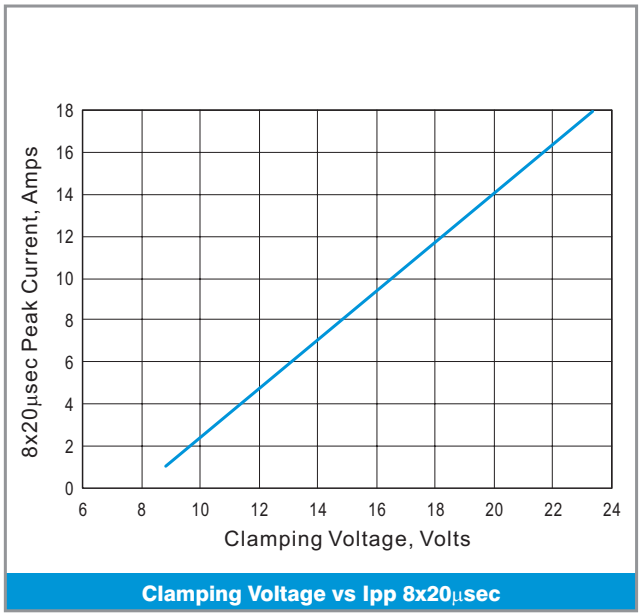
PJDLC12						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RwM}				12	V
Reverse Breakdown Voltage	V_{BR}	I_t=1mA	13.3			V
Reverse Leakage Current	I_R	V_{RwM} = 5V, T = 25°C			1	μA
Clamping Voltage	V_C	I_{PP} = 1A t_p = 8/20 μS			19	A
Clamping Voltage	V_C	I_{PP} = 5A t_p = 8/20 μS			24	V
Peak Pulse Current	I_{PP}	t_p = 8/20 μS			12	A
Junction Capacitance	C_J	Pin 1 to 2 V_R = 0V, f = 1MHZ			5	pF

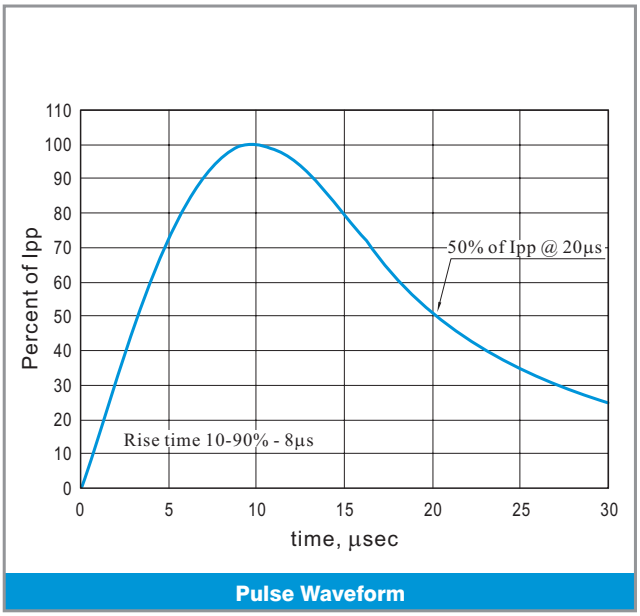
PJDLC15						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RwM}				24	V
Reverse Breakdown Voltage	V_{BR}	I_t=1mA	26.7			V
Reverse Leakage Current	I_R	V_{RwM} = 5V, T = 25°C			1	μA
Clamping Voltage	V_C	I_{PP} = 1A t_p = 8/20 μS			43	A
Clamping Voltage	V_C	I_{PP} = 5A t_p = 8/20 μS			55	V
Peak Pulse Current	I_{PP}	t_p = 8/20 μS			5	A
Junction Capacitance	C_J	Pin 1 to 2 V_R = 0V, f = 1MHZ			5	pF

PJDLC24						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	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} = 5V, T = 25°C			1	μA
Clamping Voltage	V_C	I_{PP} = 1A t_p = 8/20 μS			43	A
Clamping Voltage	V_C	I_{PP} = 5A t_p = 8/20 μS			55	V
Peak Pulse Current	I_{PP}	t_p = 8/20 μS			5	A
Junction Capacitance	C_J	Pin 1 to 2 V_R = 0V, f = 1MHZ			5	pF

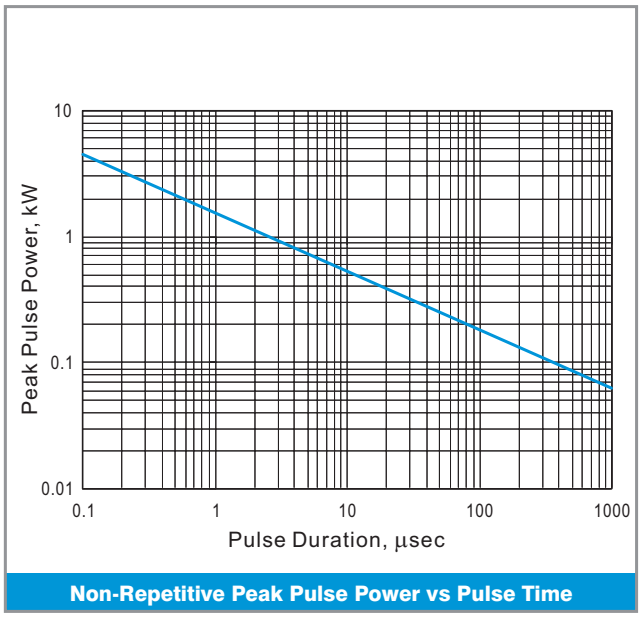
RATING AND CHARACTERISTIC CURVES



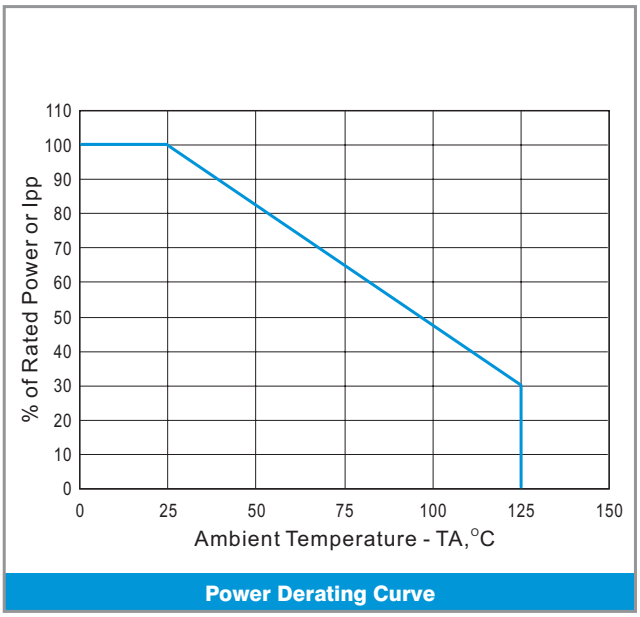
Clamping Voltage vs Ipp 8x20µsec



Pulse Waveform



Non-Repetitive Peak Pulse Power vs Pulse Time



Power Derating Curve