

Features

- Protects four I/O lines
- Low capacitance (20pF) Max
- Low operating voltage:5V
- Low clamping voltage
- Protects two lines in common and differential mode
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: $\pm 30\text{kV}$
 - Contact discharge: $\pm 30\text{kV}$
 - IEC61000-4-5 (Lightning) 25A (8/20 μs)
- RoHS Compliant

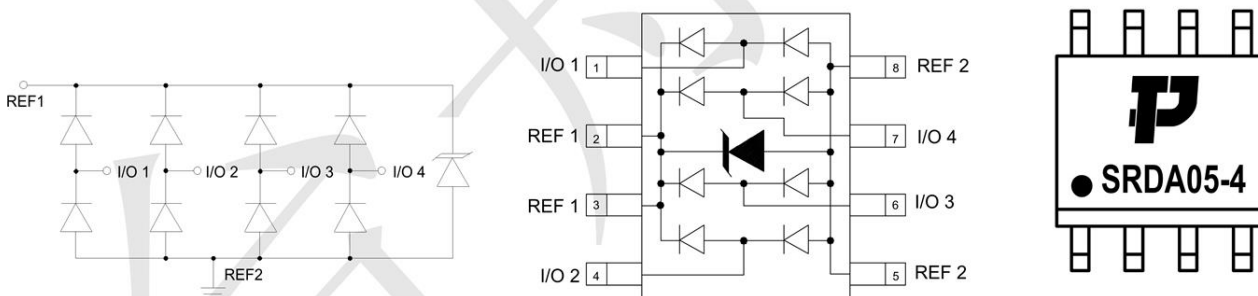
Mechanical Characteristics

- Package: SOP-8
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound.
- Moisture Sensitivity: Level 3 per J-STD-020
- Terminal Connections: See Diagram Below
- Shipping Qty :2500pcs/7Inch Tape & Reel

Applications

- T1/E1 Line Cards
- T3/E3 and DS3 Interfaces
- STS-1 Interfaces
- 10/100/1000 BaseT Ethernet
- Set Top Box
- ISDN Interfaces
- Low Voltage Interfaces

Dimensions and Pin Configuration



Absolute Maximum Ratings (Tamb=25°C unless otherwise specified)

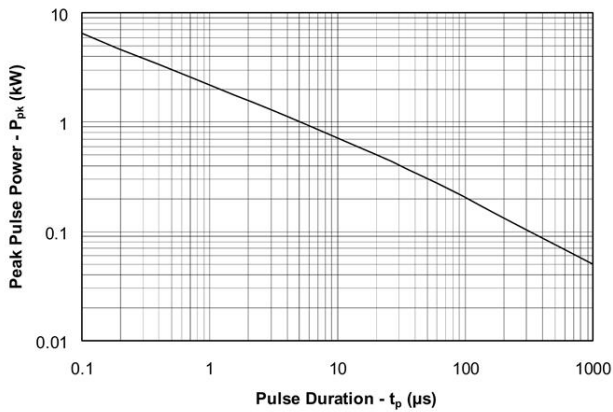
Parameter	Symbol	Value	Unit
Peak Pulse Power(8/20μs)	Ppk	500	W
Peak Forward Voltage (If=1A, tp=8/20μs)	VFP	1.5	V
Lead Soldering Temperature	TL	260(10 sec.)	°C
Operating Temperature Range	TJ	-55 to +125	°C
Storage Temperature Range	Tstg	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

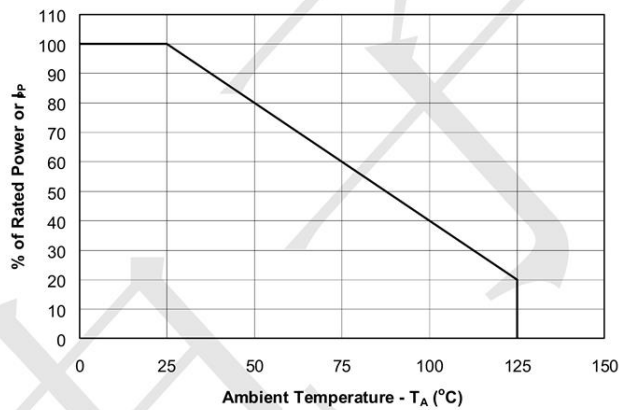
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	VRWM			5	V	
Reverse Breakdown Voltage	VBR	6			V	IT = 1mA
Reverse Leakage Current	IR			0.5	μA	VRWM = 5V, T=25°C
Clamping Voltage	VC			10	V	I _{PP} = 1A (8 x 20μs pulse) Line to Ground
Clamping Voltage	VC			12	V	I _{PP} = 10A (8 x 20μs pulse) Line to Ground
Clamping Voltage	VC			25	V	I _{PP} = 25A (8 x 20μs pulse) Line to Ground
Junction Capacitance	CJ		10	20	pF	VR = 0V, f = 1MHz Between I/O pins and Ground
			5		pF	VR = 0V, f = 1MHz Between I/O pins

Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)

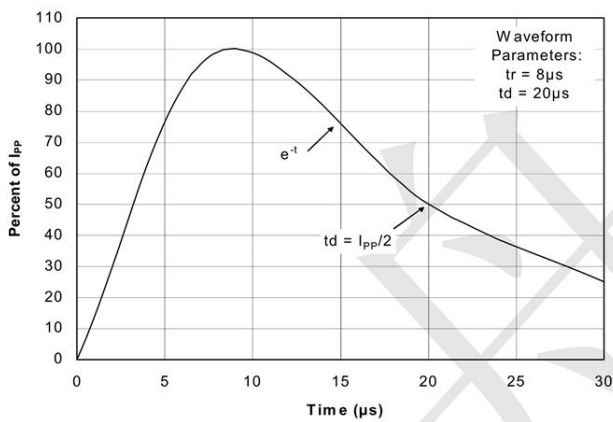
Non-Repetitive Peak Pulse Power vs. Pulse Time



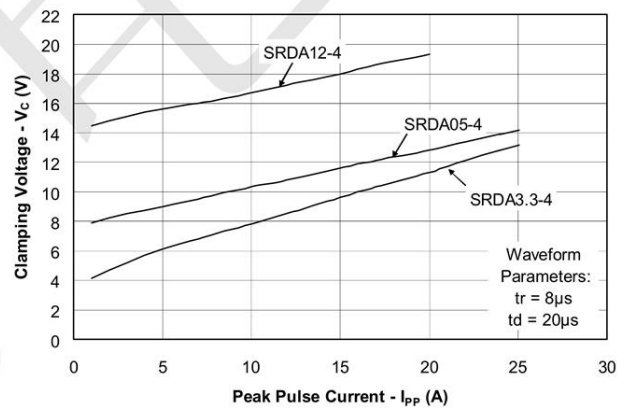
Power Derating Curve



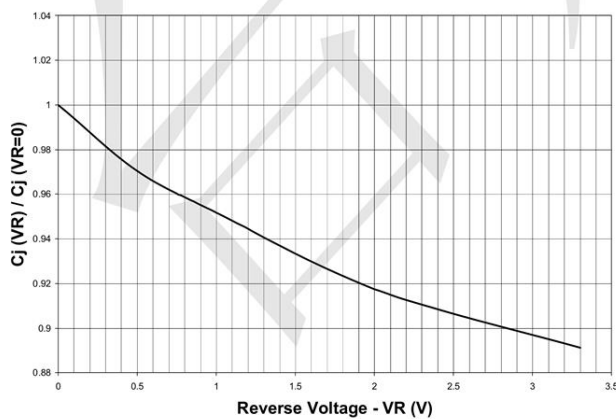
Pulse Waveform



Clamping Voltage vs. Peak Pulse Current



Variation of Capacitance vs. Reverse Voltage



Forward Voltage vs. Forward Current

