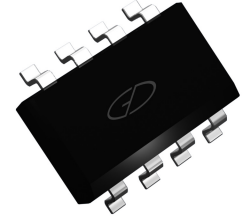


Features

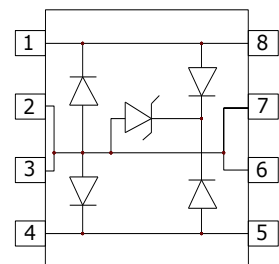
- Protects two I/O lines
- 2000W peak pulse power (tp = 8/20µs)
- Working voltage: 6V
- Low capacitance (<25pF) for high-speed interfaces
- Solid-state silicon avalanche technology



Package: SOP-8

Applications

- T1/E1 line cards
- T3/E3 and DS3 interfaces
- STS-1 interfaces
- ISDN S/T-interfaces
- ISDN U-interfaces
- 10/100 ethernet



Schematic Diagram

Protection solution to meet

- Bellcore1089 (Intra-building) 100A (2/10µs)
- ITU K.20 IPP=40A (5/310µs)
- IEC 61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 100A (8/20µs)

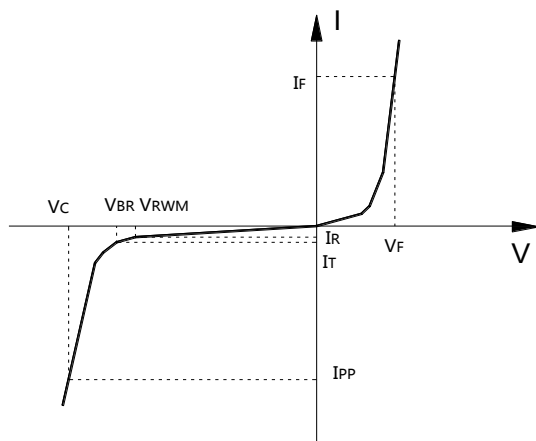
Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
ESD Rating per IEC61000-4-2:	Contact	8	KV
	Air	15	
Peak Pulse Power (tp=8/20µs waveform)	P _{PP}	2000	W
Peak Pulse Current (tp=8/20µs waveform)	I _{PP}	100	A
Lead Soldering Temperature	T _L	260 (10 sec.)	°C
Operating Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Units
V_{RWM}	Reverse Stand-off Voltage	Line to Ground	-	-	6.0	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1\text{mA}$, Line to Ground	6.0	-	-	V
I_{RM}	Reverse Leakage Current	$V_{RWM} = 6\text{V}$, Line to Ground	-	-	25	μA
V_C	Clamping Voltage	$I_{PP} = 50\text{A}$, $t_p = 8/20\mu\text{s}$ Line to Ground	-	-	20	V
		$I_{PP} = 100\text{A}$, $t_p = 8/20\mu\text{s}$ Line to Ground	-	-	28	V
C_J	Junction Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$, Between I/O Pins	-	8	12	pF
		$V_R = 0\text{V}$, $f = 1\text{MHz}$ Any I/O Pin to Ground	-	16	25	pF

Symbol	Parameter
V_{RWM}	Working Peak Reverse Voltage
V_{BR}	Breakdown Voltage @ I_T
V_C	Clamping Voltage @ I_{PP}
I_T	Test Current
I_{RM}	Leakage Current at V_{RWM}
I_{PP}	Peak Pulse Current
C_O	Off-state Capacitance
C_J	Junction Capacitance



Typical Characteristic Curves

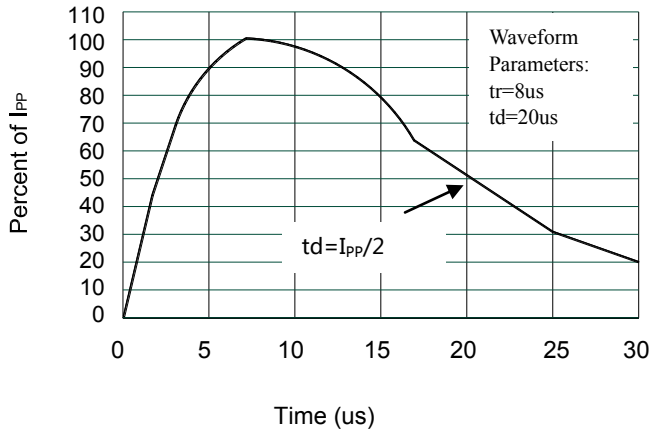


Figure1. Pulse Waveform

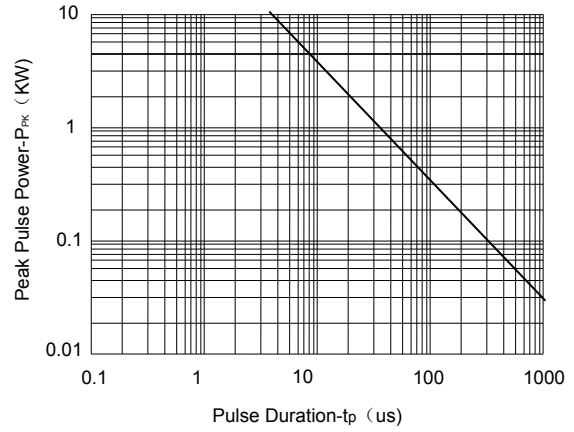


Figure2. Non-Repetitive Peak Pulse Power vs. Pulse Time

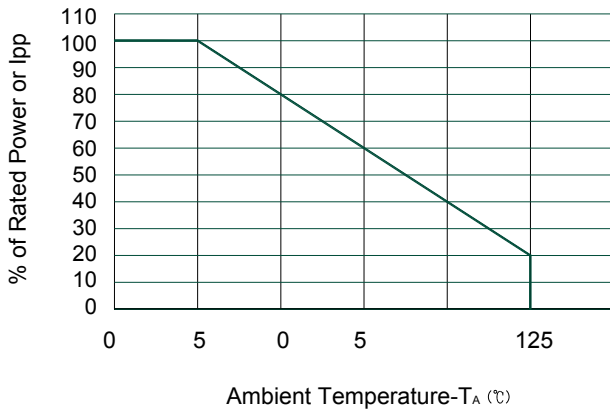


Figure3. Power Derating Curve

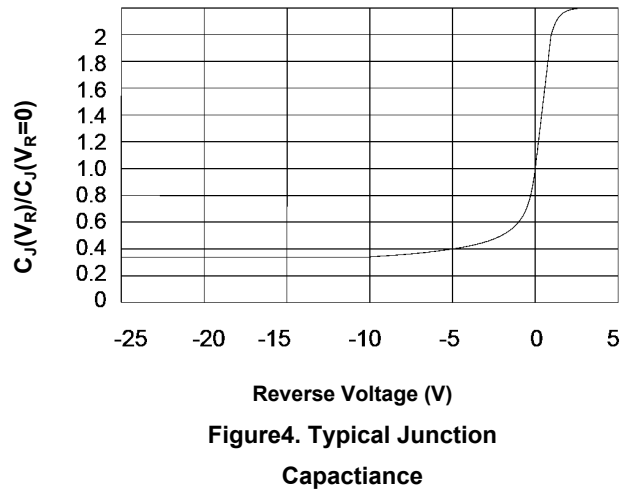
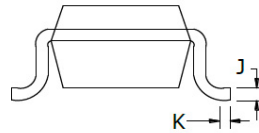
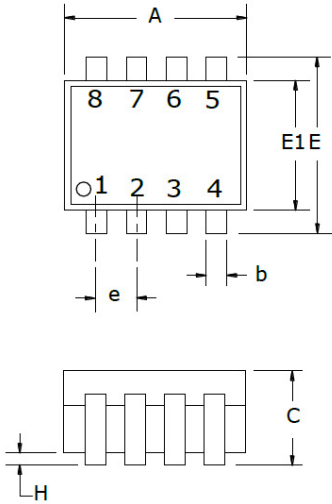


Figure4. Typical Junction Capacitance

Package information

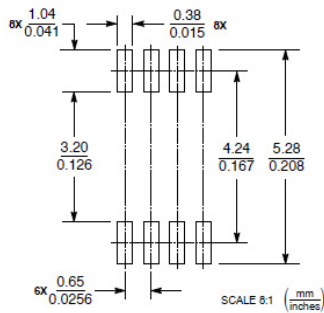
SOP-8



DIM	Millimeters		Inches	
	Min	Max	Min	Max
A	4.80	5.00	0.189	0.197
E	6.00(BSC)		0.236(BSC)	
E1	3.80	4.00	0.150	0.157
b	0.33	0.51	0.013	0.020
C	1.35	1.75	0.053	0.069
J	0.17	0.25	0.007	0.010
e	1.27(BSC)		0.05(BSC)	
K	0.40	1.27	0.016	0.050
H	0.10	0.25	0.004	0.010

Recommended Pad Layout

Dimensions in mm/inch



Ordering Information

Device	Package	Carrier	Quantity	HSF Status
GSLC03-6	SOP-8	Tape & Reel (13")	2500pcs / Reel	RoHS Compliant