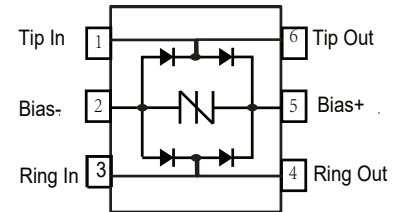
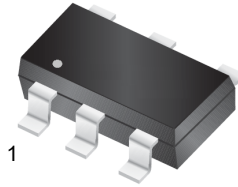


SIDACtor Protection Thyristors in SOT23-6

Features

- 1800Watts peak pulse power ($t_p = 8/20\mu s$)
- SOT23-6 Package
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance (1.2pF typical Line to Line)
- ESD Protection one data/power lines to:
IEC 61000-4-2 $\pm 30kV$ contact $\pm 30kV$ air
IEC 61000-4-4 (EFT) 40A (5/50ns)
IEC 61000-4-5 (Lightning) 55A (8/20 μs)



Mechanical Data

- **Case:** SOT23-6 (plastic package).
Lead free; RoHS compliant; Halogen free
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

Applications

- ADSL,ADSL2+
- VDSL2,VDSL2+
- G.fast

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

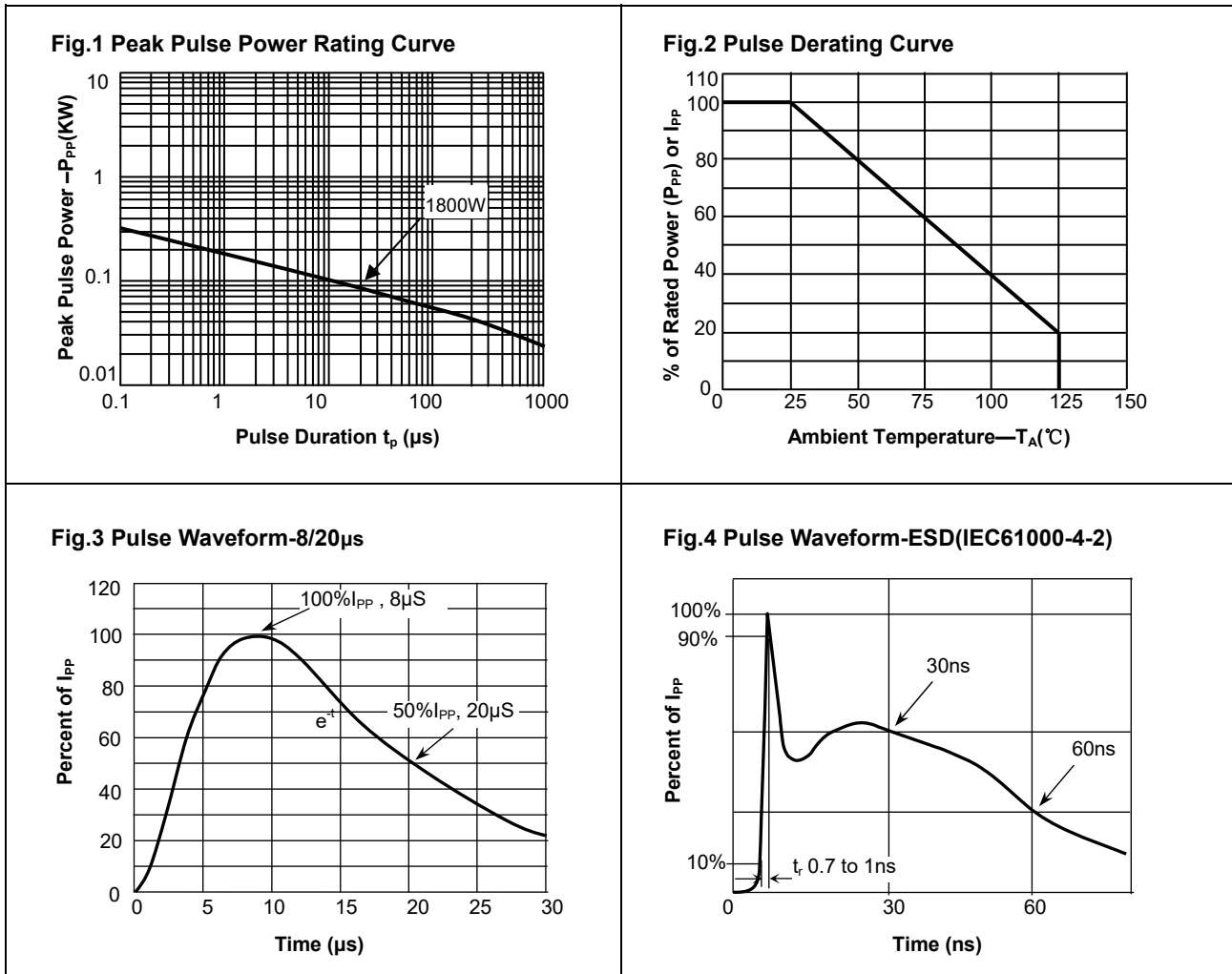
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu S$)	P_{PP}	1800	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	30/30	kV
Peak Pulse Current ($T_P = 8/20\mu S$)	I_{PP}	55	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

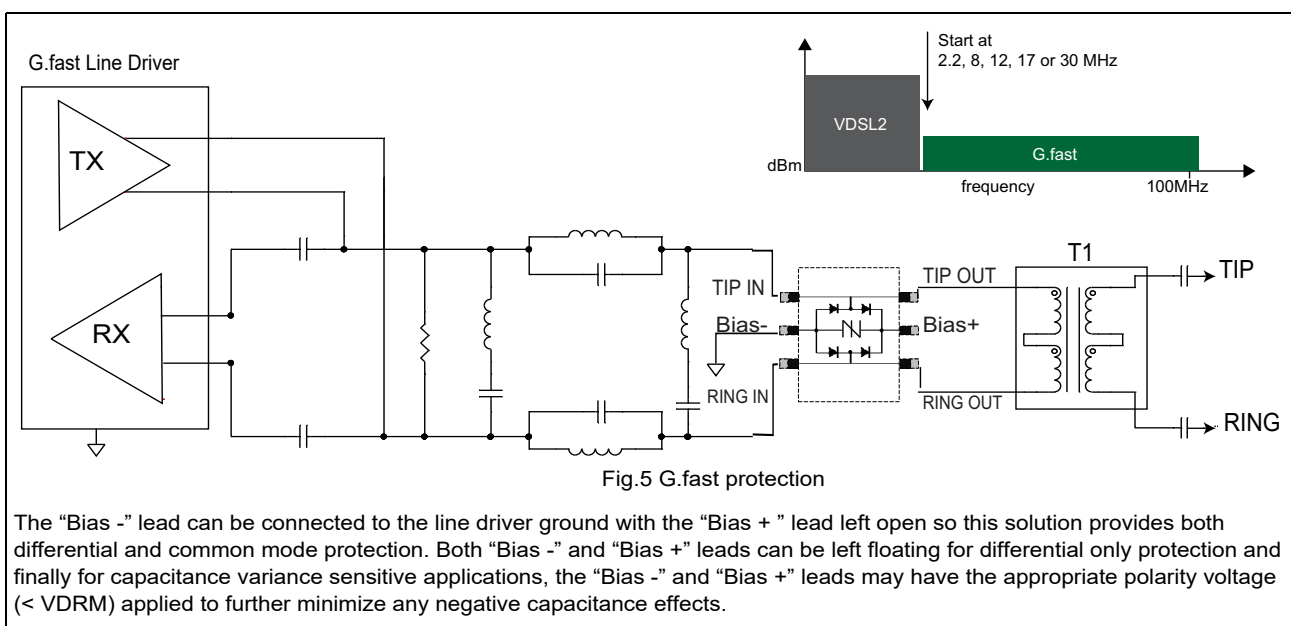
($T_A = 25\text{ °C}$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				8	V
Holding Voltage	V_H	$I_T=I_H$		3.0		V
Holding Current	I_H		50			mA
Reverse Leakage Current	I_R	$V_{RWM}=24V$			0.5	μA
Clamping Voltage(ESD)	V_C	$I_{PP}=55A, T_P=8/20\mu S$		35		V
Trigger Voltage	V_T			13	15	V
Junction Capacitance	C_J	$V_R=0V, f=1MHz, I/O$ to I/O		1.2		pF

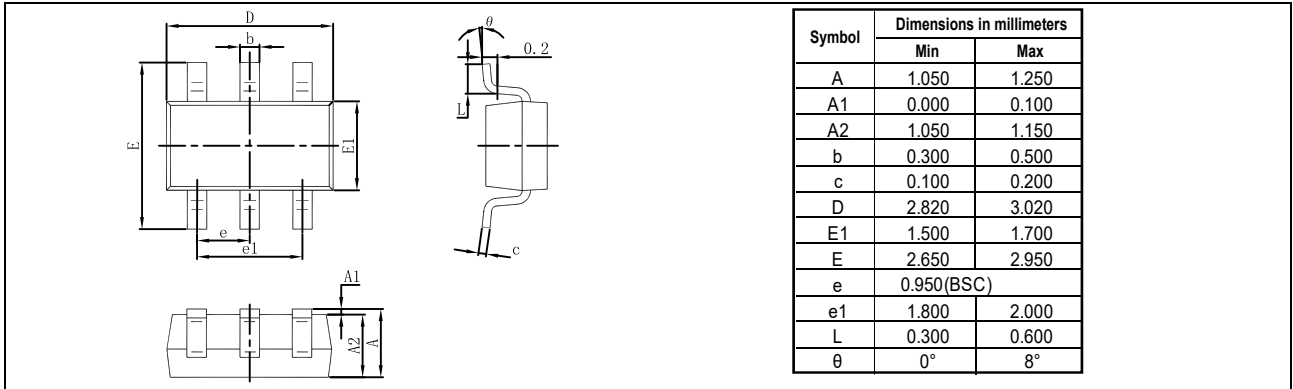
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



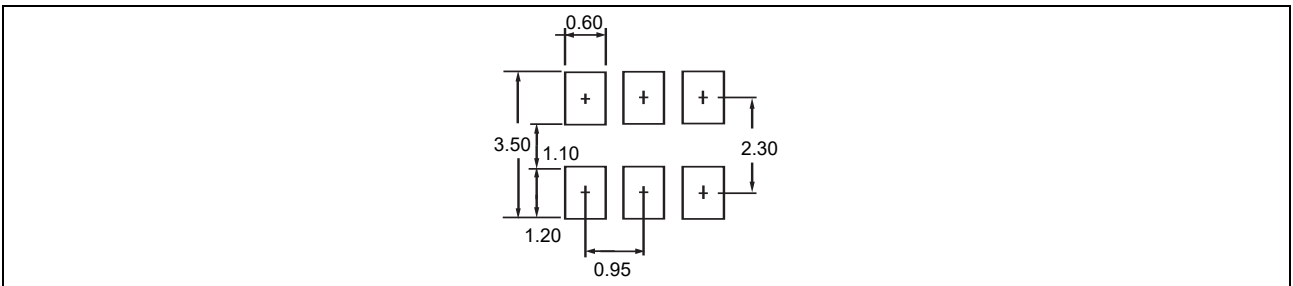
Application



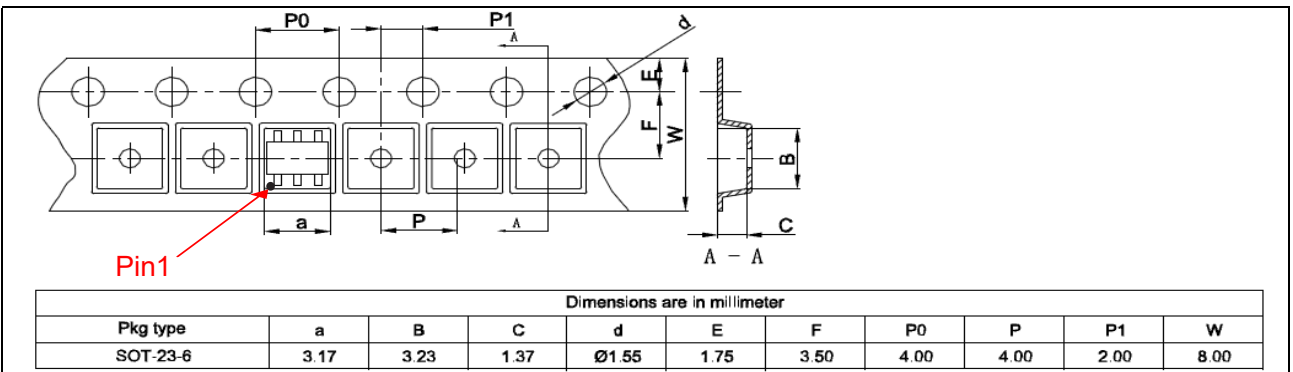
Package Dimensions



Pad dimensions



Package information



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
TGF008TS	SOT23-6	Tape and reel	3000pcs / reel	EIA STD RS-481