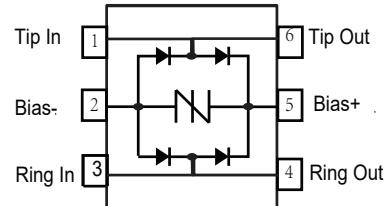


Features

- 1500Watts peak pulse power ($t_p = 8/20\mu s$)
- SOT-23-6 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 ±30KV contact ±30KV air
 - IEC 61000-4-4 (EFT) 40A (5/50ns)
 - IEC 61000-4-5 (Lightning) 50A (8/20μs)



Mechanical Data

- **Case:** SOT-23-6 (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

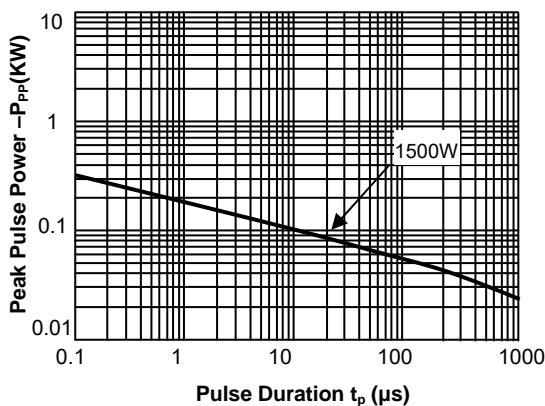
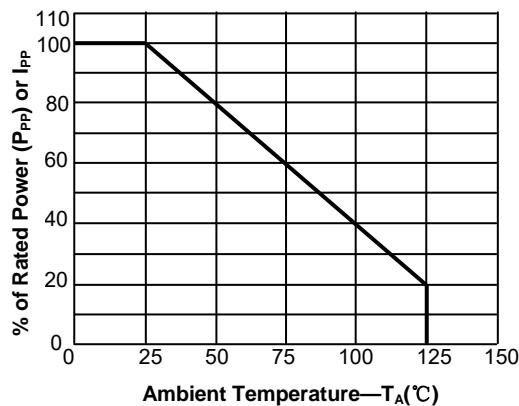
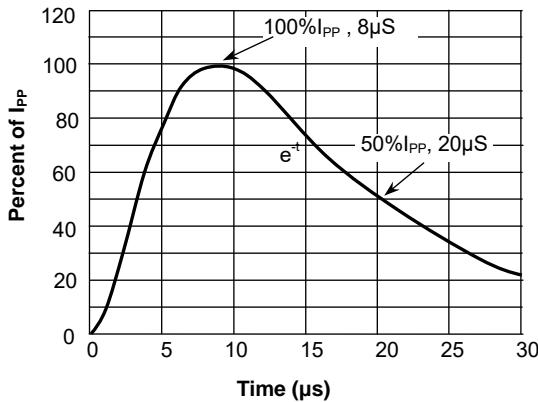
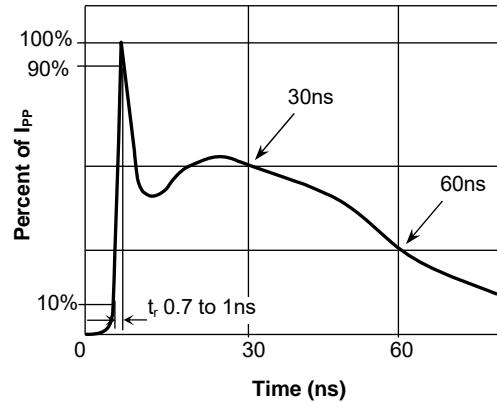
Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_P=8/20\mu s$)	P_{PP}	1500	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}	50	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

($T_A = 25$ °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				24	V
Holding Voltage	V_H	$I_T=I_H$		3.0		V
Holding Current	I_H		20			mA
Reverse Leakage Current	I_R	$V_{RWM}=24V$			0.5	uA
Clamping Voltage(ESD)	V_C	$I_{PP}=50A, T_P=8/20\mu s$		25		V
Trigger Voltage	V_T			31		V
Junction Capacitance	C_J	$V_R=0V, f=1MHz, I/O to I/O$		1.2		pF

Typical Characteristics ($T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified)
Fig.1 Peak Pulse Power Rating Curve**Fig.2 Pulse Derating Curve****Fig.3 Pulse Waveform-8/20μs****Fig.4 Pulse Waveform-ESD(IEC61000-4-2)**
Application

G.fast Line Driver

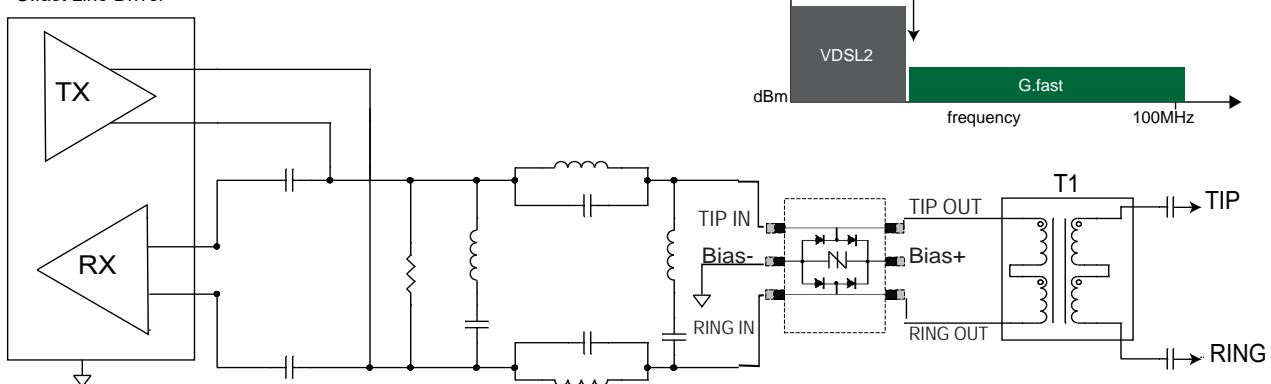
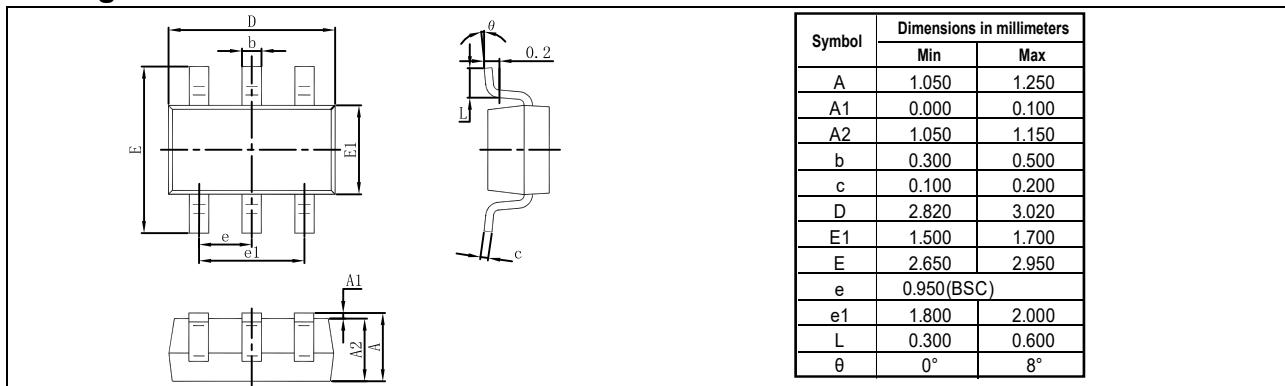


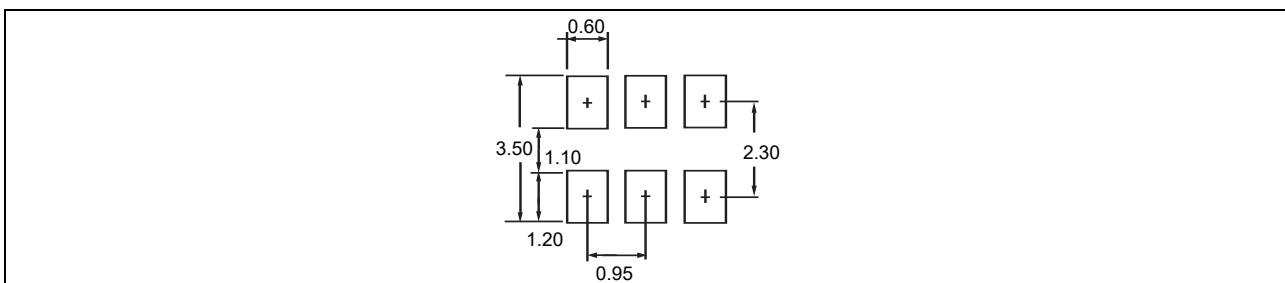
Fig.5 G.fast protection

The "Bias -" lead can be connected to the line driver ground with the "Bias +" lead left open so this solution provides both differential and common mode protection. Both "Bias -" and "Bias +" leads can be left floating for differential only protection and finally for capacitance variance sensitive applications, the "Bias -" and "Bias +" leads may have the appropriate polarity voltage (< VDRM) applied to further minimize any negative capacitance effects.

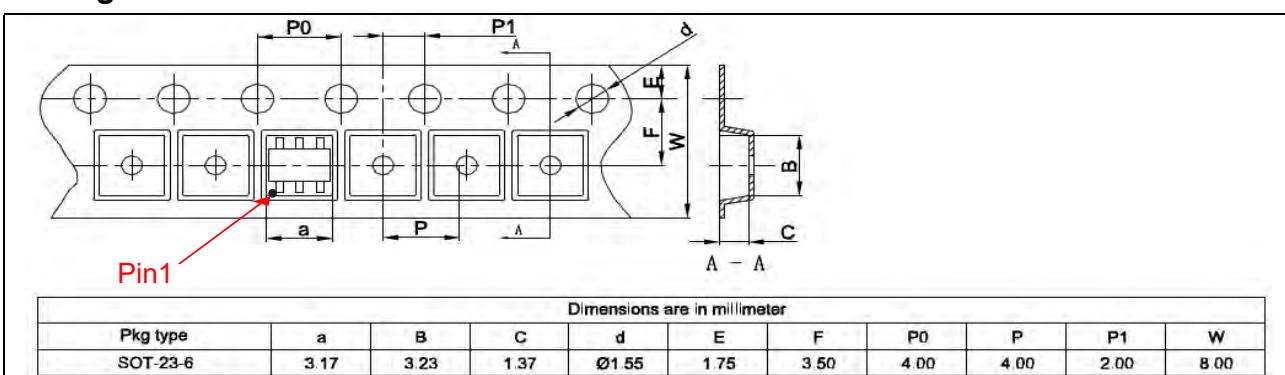
Package Dimensions



Pad dimensions



Package information



Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
YELST262450AU	SOT-23-6	Tape and reel	3000pcs / reel	EIA STD RS-481