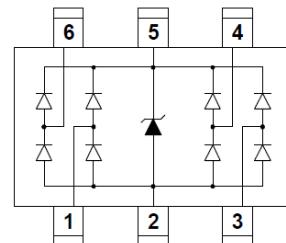


Features

- 48Watts peak pulse power ($t_p = 8/20\mu s$)
- SOT-23-6 Package
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance (0.3pF typical I/O to I/O)
- ESD Protection for high-speed data lines to:
IEC 61000-4-2 $\pm 20\text{KV}$ contact $\pm 20\text{KV}$ air
IEC 61000-4-4 (EFT) 40A (5/50ns)
IEC 61000-4-5 (Lightning) 6A (8/20 μs)



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

- USB 3.0, USB 2.0, MHL
- HDMI 2.0, Display Port 1.3, eSATA
- Unified Display Interface (UDI)
- Digital Visual Interface (DVI)
- High speed serial interfaces

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

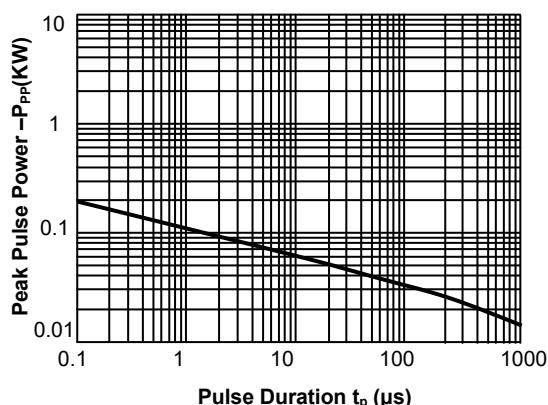
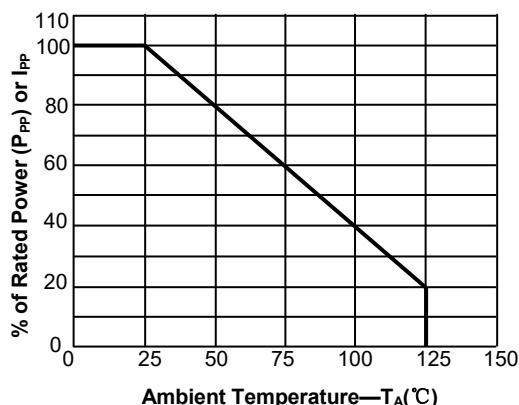
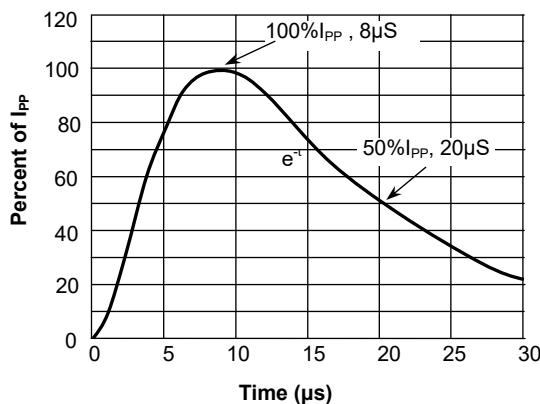
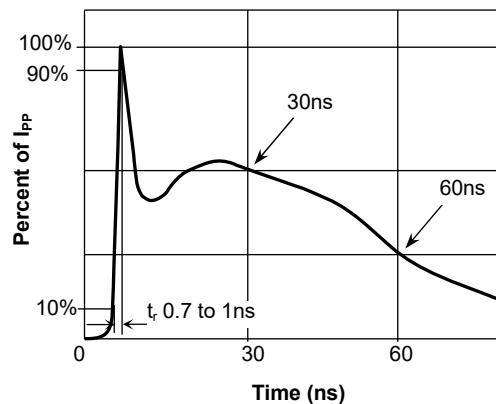
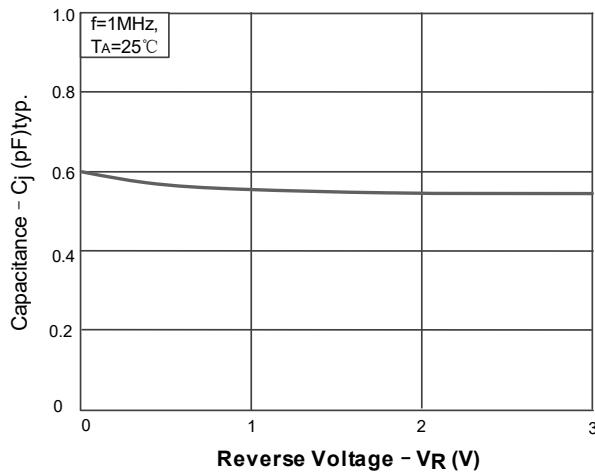
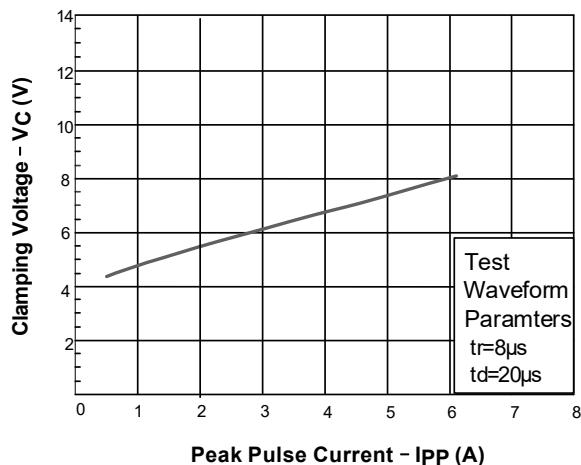
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	48	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	20/20	kV
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	6.0	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

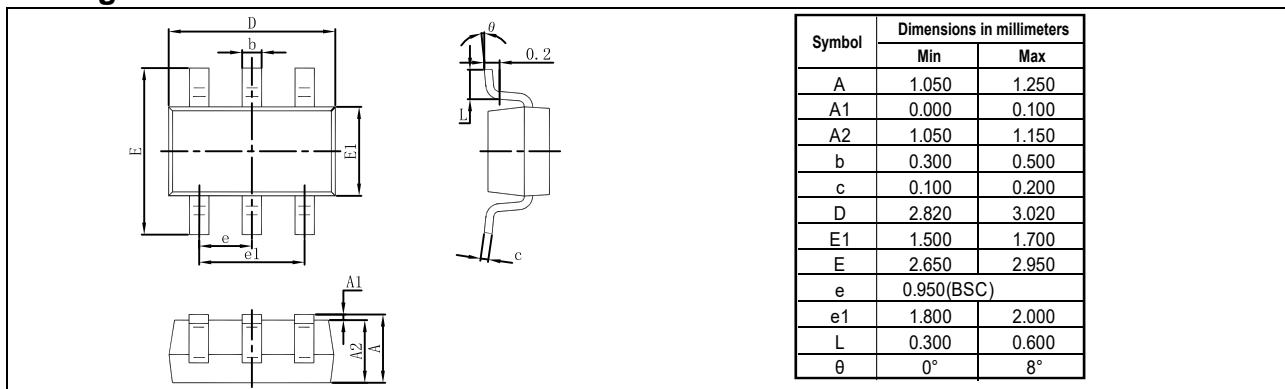
($T_A = 25$ °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	4			V
Reverse Leakage Current	I_R	$V_R=5\text{V}$			0.5	μA
Clamping Voltage(SURGE)	V_C	$I_{PP}=6\text{A}, T_p=8/20\mu s$		8	11	V
Junction Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}, \text{I/O to I/O}$		0.3		pF
	C_J	$V_R=0\text{V}, f=1\text{MHz}, \text{I/O to GND}$		0.6		pF

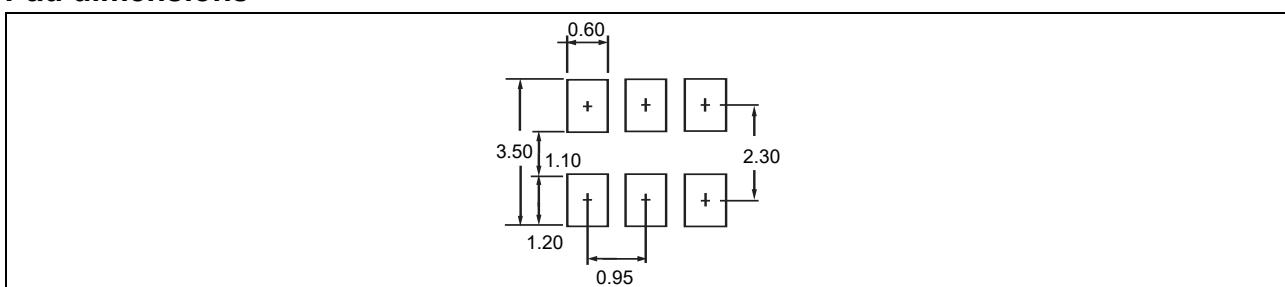
Typical Characteristics ($T_{amb} = 25^{\circ}\text{C}$ unless otherwise specified)

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)

Fig.5 Capacitance vs. Reverse Voltage

Fig.6 Clamping Voltage vs.Ipp


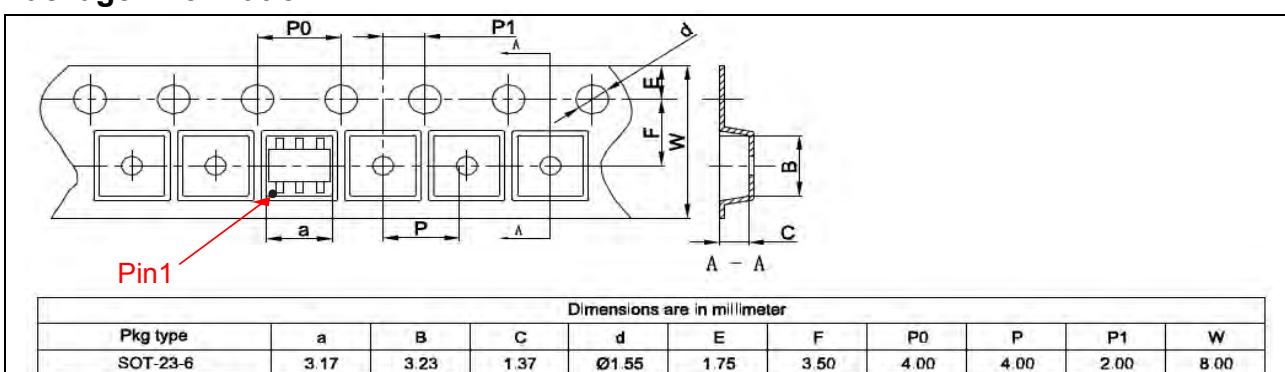
Package Dimensions



Pad dimensions



Package information



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
YEUST263R06AU	SOT-23-6	Tape and reel	3000pcs / reel	EIA STD RS-481