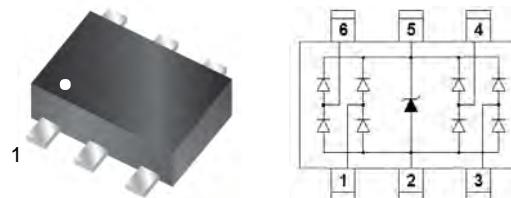


Features

- 40Watts peak pulse power ($t_p = 8/20\mu s$)
- SOT-563 Package
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Low capacitance (0.2pF typical I/O to I/O)
- ESD Protection for high-speed data lines to:
IEC 61000-4-2 ±8KV contact ±15KV air
IEC 61000-4-4 (EFT) 40A (5/50ns)
IEC 61000-4-5 (Lightning) 4A (8/20μs)



Mechanical Data

- **Case:** SOT-563 (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

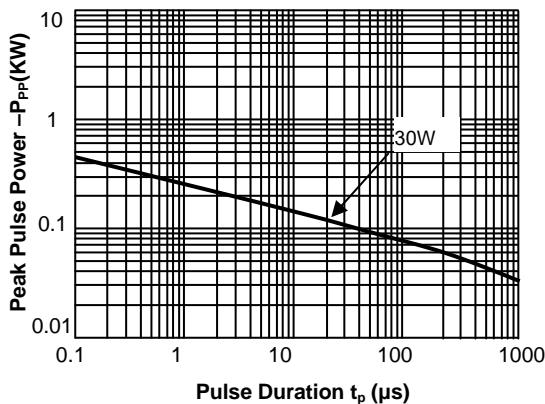
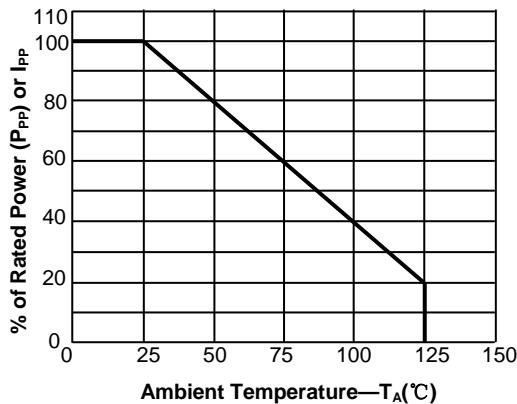
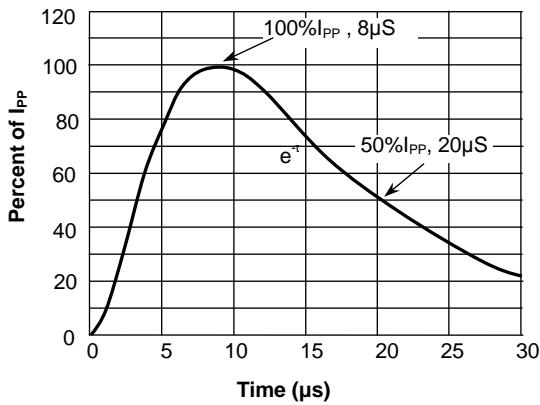
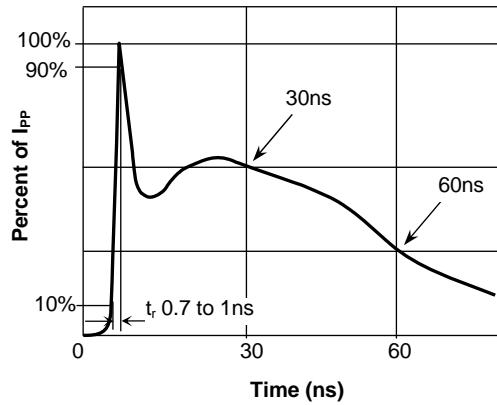
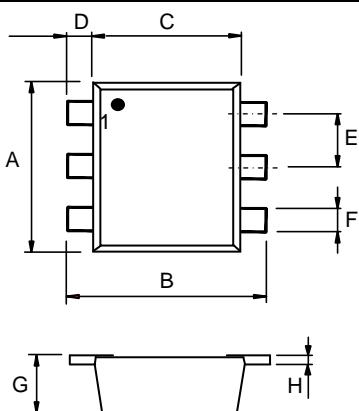
Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	40	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	8/15	kV
Peak Pulse Current ($T_p = 8/20\mu s$)	I_{PP}	4.0	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

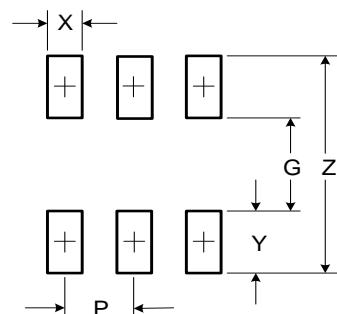
($T_A = 25$ °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	6.0			V
Reverse Leakage Current	I_R	$V_R=5V$		0.01	1	µA
Clamping Voltage(SURGE)	V_C	$I_{PP}=4A, T_p=8/20\mu s$		10		V
Clamping Voltage(TLP)	V_C	$I_{PP}=16A, T_p=0.2/100ns$		13		V
Dynamic Resistance	R_{DYN}	$TLP=0.2/100ns$		0.3		Ω
Junction Capacitance	C_J	$V_R=0V, f=1MHz, I/O to I/O$		0.2		pF
	C_J	$V_R=0V, f=1MHz, I/O to GND$		0.4		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)**
Package Dimensions


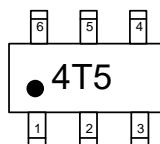
Symbol	Dimensions in millimeters	
	Min	Max
A	1.50	1.70
B	1.50	1.70
C	1.10	1.30
D	0.10	0.30
E	0.50BSC	
F	0.17	0.27
G	0.50	0.60
H	0.08	0.16

Pad Dimensions



DIM	Millimeters
Z	1.91
G	0.89
P	0.51 TYP
X	0.3
Y	0.51

Marking



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
YEUST560504AV	SOT-563	Tape and reel	3000pcs / reel	EIA STD RS-481