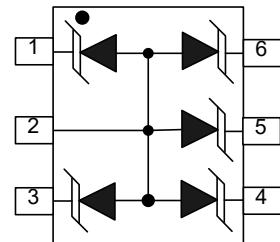
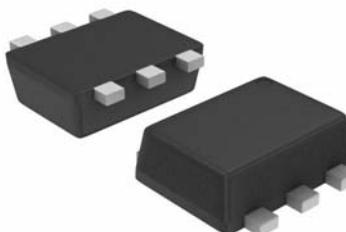


## Features

- 90Watts 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
- Normal capacitance (15pF typical I/O to GND)
- Protection to:
  - IEC 61000-4-2 ±8kV contact ±15kV air
  - IEC 61000-4-4 (EFT) 40A (5/50ns)
  - IEC 61000-4-5 (Lightning) 7.5A (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

- Computers and peripherals
- Communication systems
- Notebook
- Cellular handsets and accessories
- Portable electronics
- Audio and video equipment

## Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_p=8/20\mu s$ )	$P_{PP}$	90	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	8/15	kV
Peak Pulse Current ( $t_p = 8/20\mu s$ )	$I_{PP}$	7.5	A
Junction Temperature	$T_J$	-55 to +125	°C
Storage temperature	$T_{STG}$	-55 to +150	°C

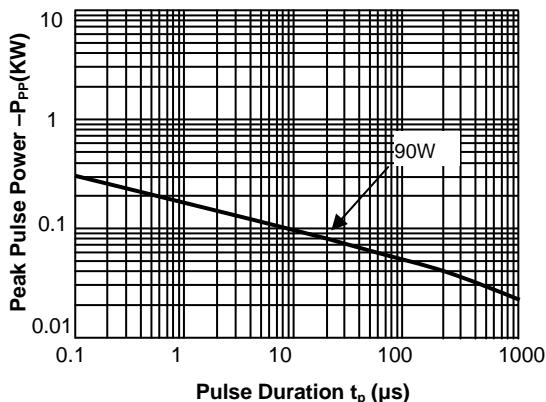
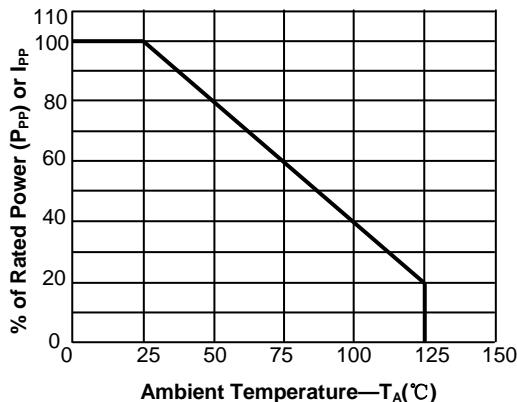
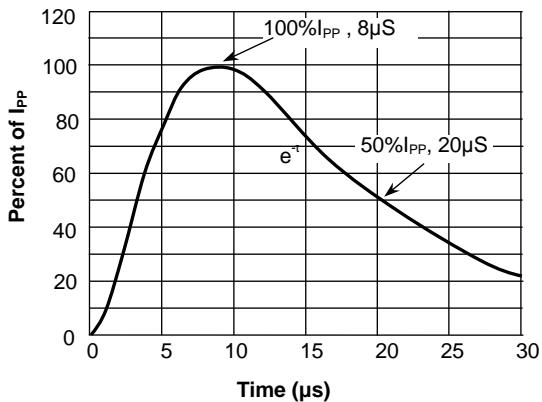
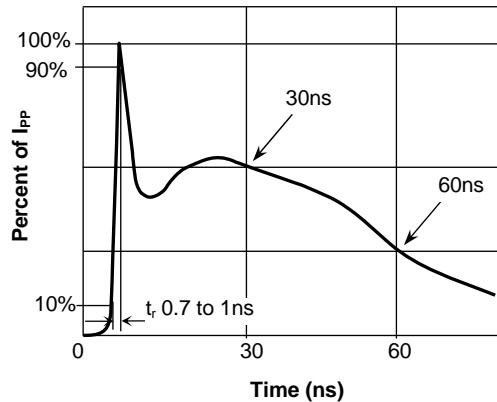
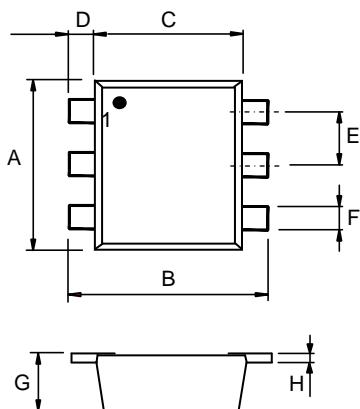
## Electrical Characteristics

( $T_A = 25$  °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			V
Reverse Leakage Current	$I_R$	$V_R=5V$		0.01	0.5	µA
Clamping Voltage(SURGE)	$V_C$	$I_{PP}=7.5A, T_p=8/20\mu s$		12		V
Trigger Voltage(ESD)	$V_T$	$V_{ESD} = +8kV$		100		V
Clamping Voltage(ESD)	$V_C$	$V_{ESD} = +8kV$		20		V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz^{(1)}$		15		pF

Note1: Pin 1, 3, 4, 5, 6 to Pin 2

**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**


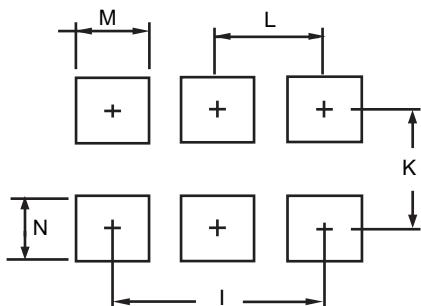
Dim	millimeters	
	min	max
A	1.50	1.70
B	1.50	1.70
C	1.10	1.30
D	0.10	0.30
E	0.50BSC	
F	0.17	0.27
G	0.50	0.60
H	0.08	0.16



# YEDST56057A5V

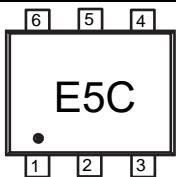
## ESD Protection Diode

### Pad Dimensions



Dim	millimeters
I	1.02
K	1.40
L	0.51
M	0.51
N	0.30

### Marking



### Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
YEDST56057A5V	SOT-563	Tape and reel	3000pcs / reel	EIA STD RS-481