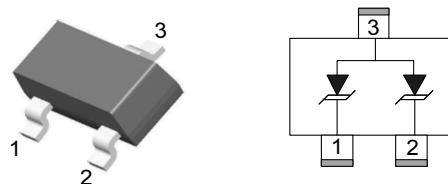


## Features

- 680Watts peak pulse power ( $T_p = 8/20\mu s$ )
- Tiny SOT-23 package
- Unidirectional configurations
- Protects two I/O port
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2  $\pm 30KV$  contact  
 $\pm 30KV$  air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 45A (8/20 $\mu s$ )



## Mechanical Data

- **Case:** SOT-23 (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

- Cellular Handsets and Accessories
- RS-232, RS-422 & RS-485
- Control & Monitoring Systems
- Set-Top Box
- Portable Electronics
- Other electronics equipments Communication systems

## Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

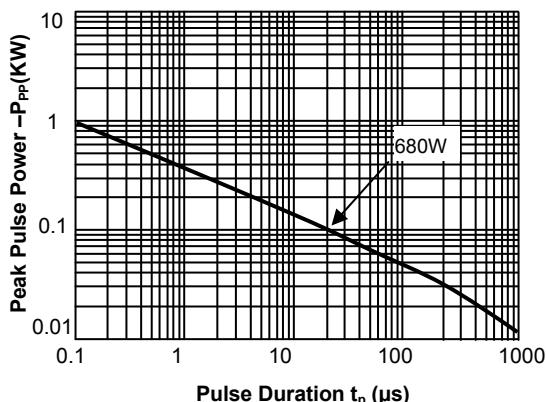
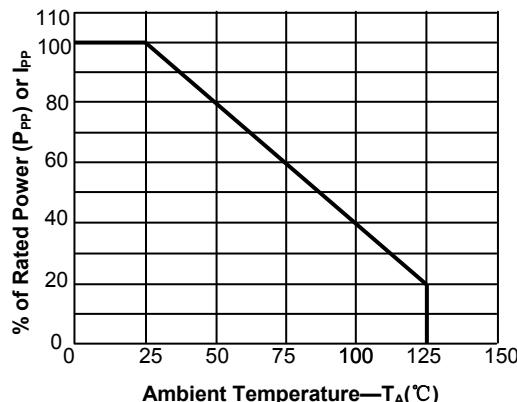
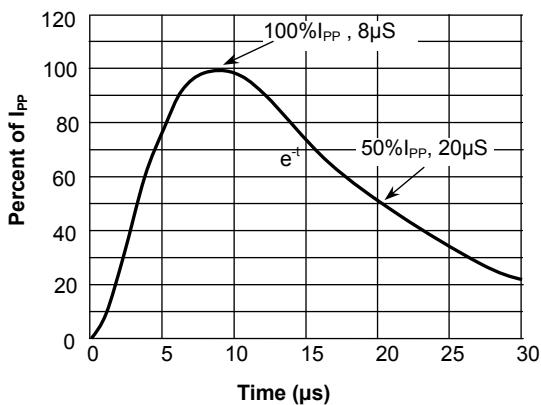
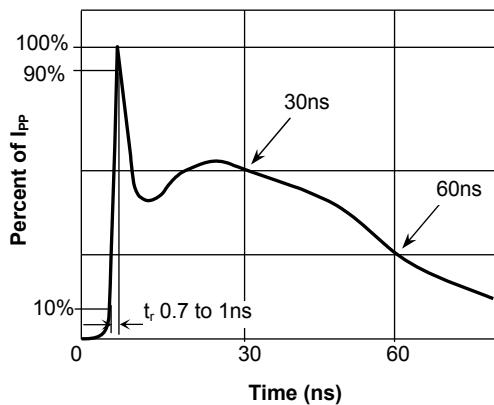
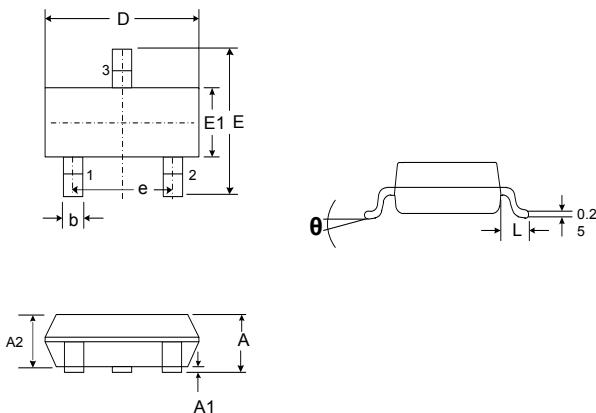
Parameter	Symbol	Value	Unit
Peak Pulse Power ( $T_p=8/20\mu s$ )	$P_{PP}$	680	W
ESD contact/air discharge (IEC-61000-4-2)	$V_{ESD}$	30/30	kV
Peak Pulse Current ( $T_p = 8/20\mu s$ )	$I_{PP}$	45	A
Junction Temperature	$T_J$	-55 to +125	°C
Storage temperature	$T_{STG}$	-55 to +150	°C

## Electrical Characteristics

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

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	$V_{RWM}$				5.0	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T=1mA$	6.0	7.5		V
Reverse Leakage Current	$I_R$	$V_{RWM}=5V$			0.5	uA
Clamping Voltage (IEC 61000-4-5)	$V_C$	$I_{PP}=45A$		15		V
Junction Capacitance	$C_J$	$V_R=0V, f=1MHz$		320		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**


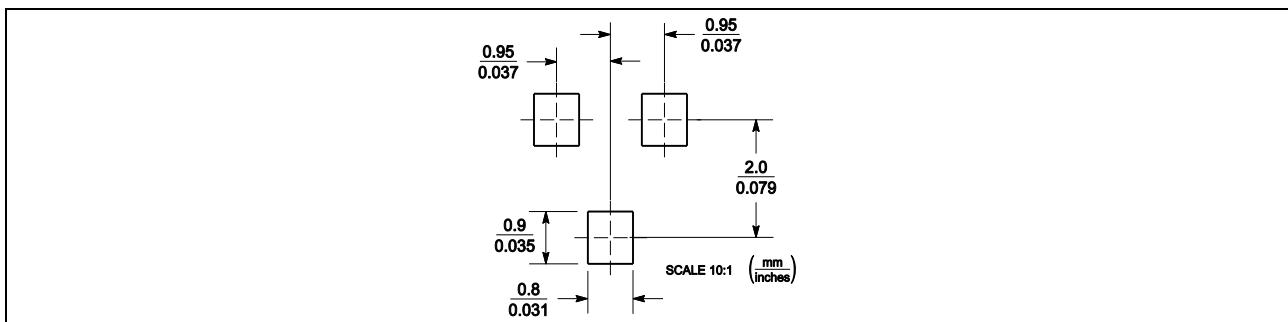
SYMBOL	DIMENSIONS			
	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.89	1.12	0.035	0.044
A1	0.01	0.10	0.0006	0.0043
A2	0.88	1.02	0.035	0.040
D	2.80	3.04	0.110	0.120
E	2.10	2.64	0.082	0.104
E1	1.20	1.40	0.047	0.055
e	1.90BSC		0.75 BSC	
L	0.40	0.60	0.015	0.024
θ	0	8	0	8



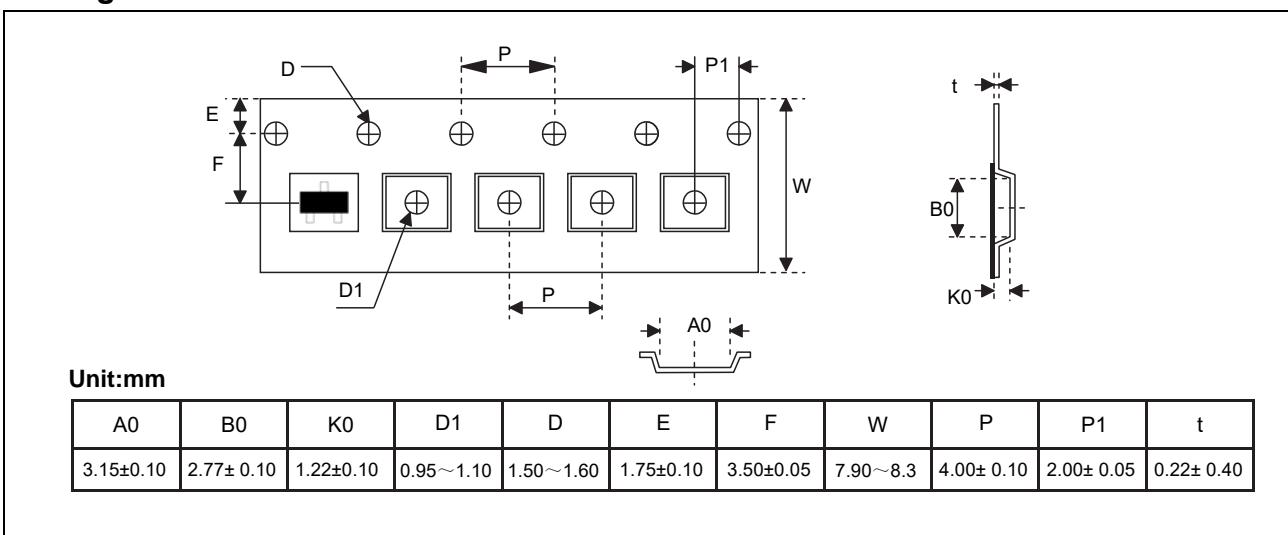
**YEDST230545AG**

ESD Protection Diode

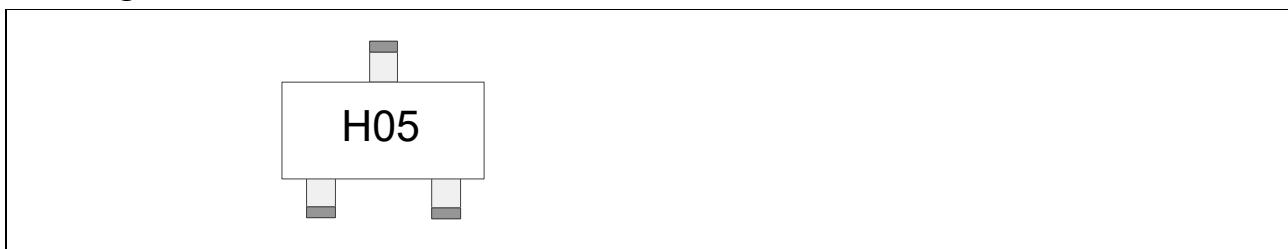
### Pad Dimensions



### Package Information



### Marking



### Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
YEDST230545AG	SOT-23	Tape and reel	3000pcs / reel	EIA STD RS-481