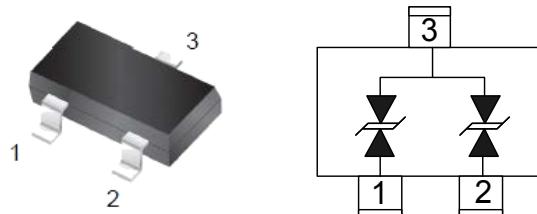
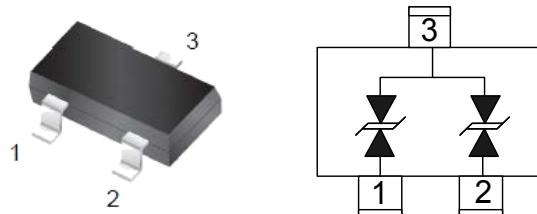


Features

- 100Watts peak pulse power ($t_p = 8/20\mu s$)
- Tiny SOT-23 package
- Bidirectional configurations
- Protects one I/O port
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2 $\pm 10KV$ contact
 $\pm 15KV$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 12A (8/20 μs)



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

- Subscriber identity module(SIM) card protection
- Computers and peripherals
- PAD
- Audio and video equipment
- Cellular handsets and accessories
- Other electronics equipments Communication systems

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

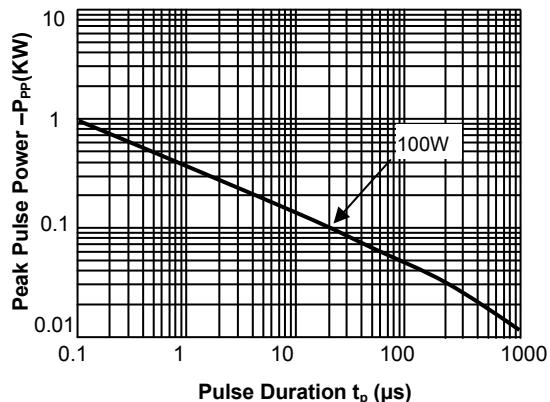
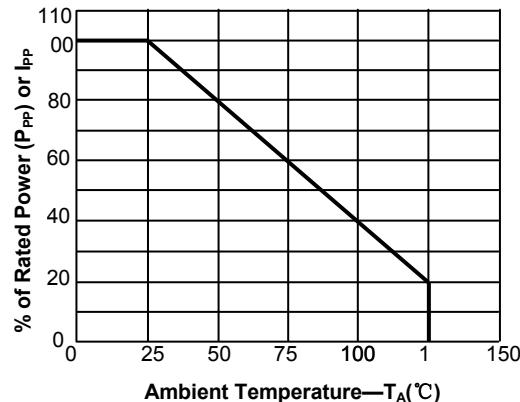
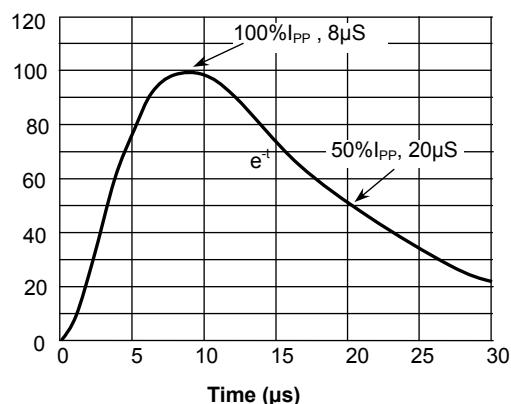
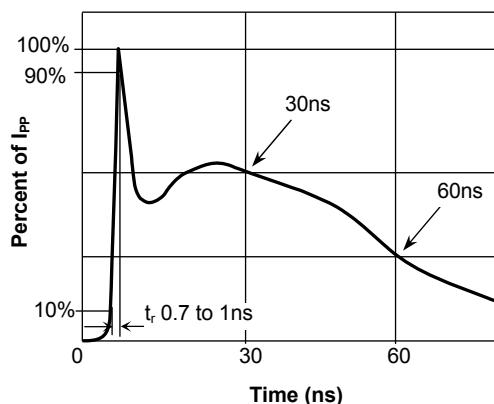
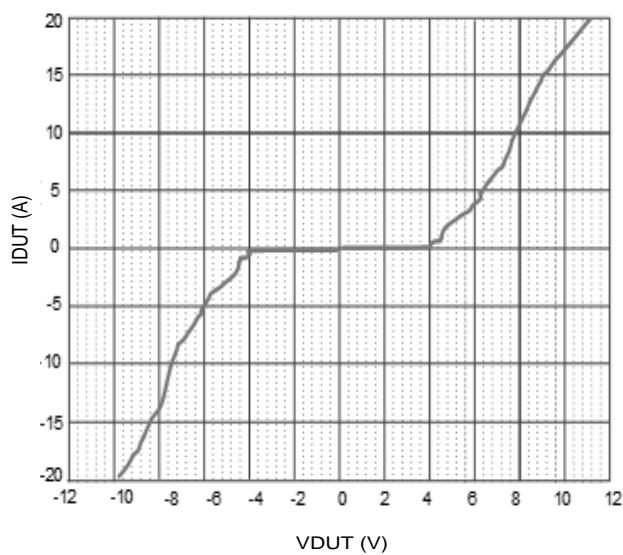
Parameter	Symbol	Value	Unit
ESD Air Discharge per IEC 61000-4-2	V_{ESD}	± 15	kV
ESD Contact Discharge per IEC 61000-4-2	V_{ESD}	± 10	kV
Peak pulse power 8/20 μs waveform	P_{PPM}	100	W
Peak pulse current 8/20 μs waveform	I_{PPM}	10	A
Operating Temperature	T_J	- 55 to + 125	°C
Storage Temperature	T_{STG}	- 55 to + 150	°C

Electrical Characteristics

($T_A = 25^\circ C$ unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				3.3	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	4.0	4.3		V
Reverse Leakage Current	I_R	$V_R=3.3V$		0.01	0.5	μA
Clamping Voltage(SURGE)	V_C	$I_{PP}=10A, T_P=8/20\mu s$			10	V
Clamping Voltage(ESD)	V_C	$V_{ESD} = +6kV$		7.5		V
Clamping Voltage(TLP)	V_C	$I_{PP}=10A, T_P=100ns$		7.5		V
Clamping Voltage(TLP)	V_C	$I_{PP}=18A, T_P=100ns$		10		V
Dynamic Resistance	R_{dyn}	$I_{TLP}=0A \sim 20A$		0.235		Ω
Junction Capacitance	C_J	$V_R=0V, f=1MHz, pin1,2 to 3$		18		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 Transmission Line Pulse (tp=100ns)




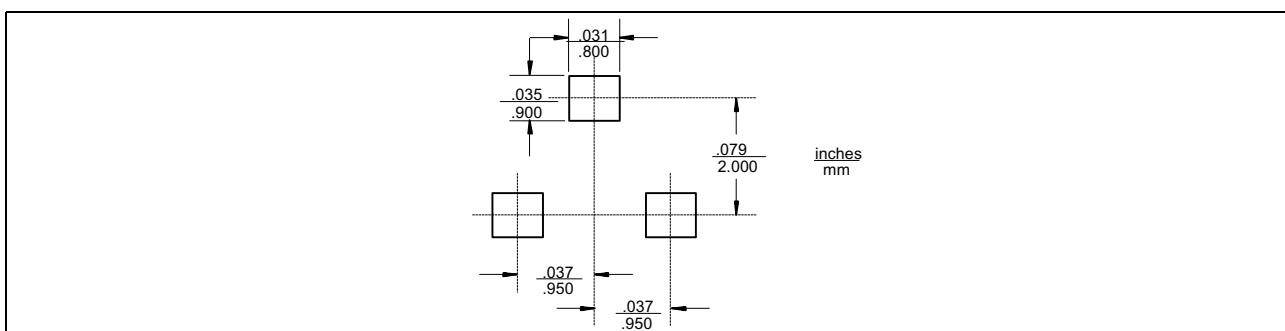
YEDST233R10AG

ESD Protection Diode

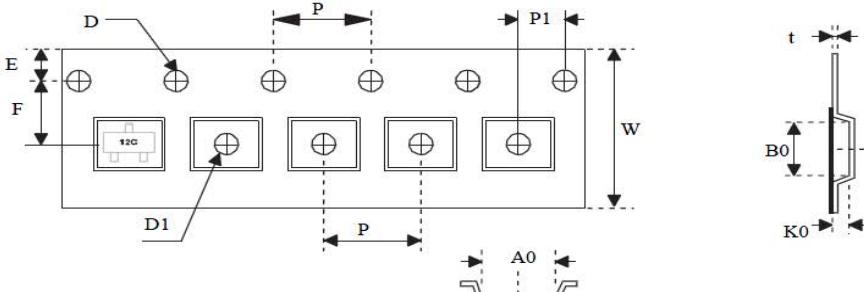
Package Dimensions

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

Pad Dimensions



Pad Dimensions



A0	B0	K0	D1	D	E	F	W	P	P1	t
3.15±0.10	2.77±0.10	1.22±0.10	0.95~1.10	1.50~1.60	1.75±0.10	3.50±0.05	7.90~8.3	4.00±0.10	2.00±0.05	0.22±0.40

Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
YEDST233R10AG	LL3	SOT-23	Tape and reel	3000pcs / reel	EIA STD RS-481