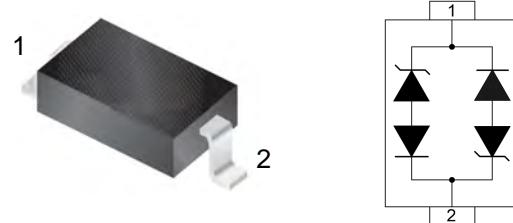


Features

- 350Watts peak pulse power ($T_p = 8/20\mu s$)
- SOD-323 package
- Bidirectional configurations
- Low clamping voltage
- Low leakage current
- Low capacitance ($C_j=1pF$ typ.)
- Protection one data/power line to:
IEC 61000-4-2 $\pm 30kV$ contact $\pm 30kV$ air
IEC 61000-4-4 (EFT) 40A (5/50ns)
IEC 61000-4-5 (Lightning) 11A (8/20 μs)



Mechanical Data

- **Case:** SOD-323 (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

- Ethernet - 10/100/1000 Base T
- Cellular Phones
- Handheld - Wireless Systems
- Personal Digital Assistant (PDA)
- USB Interface

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

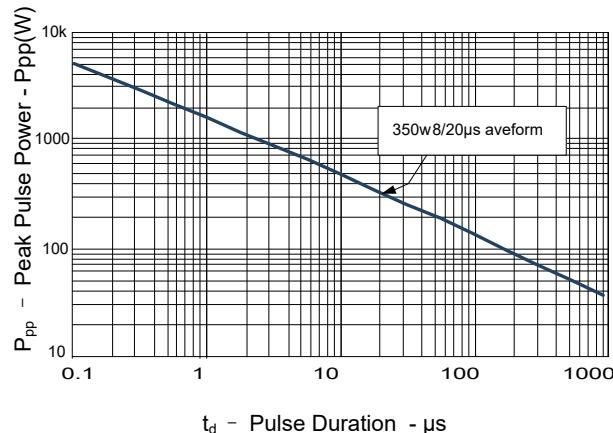
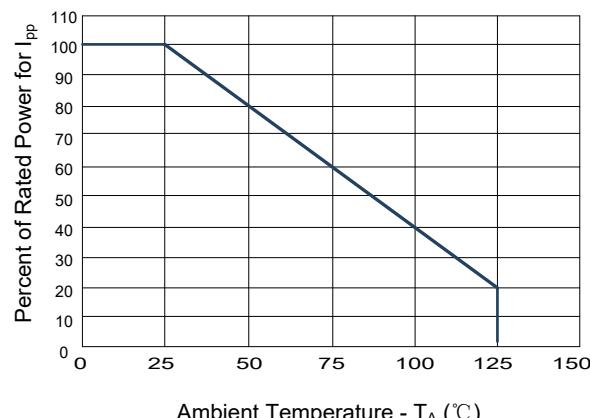
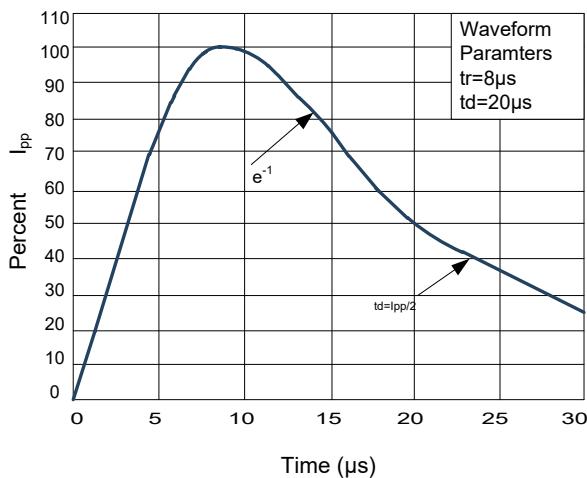
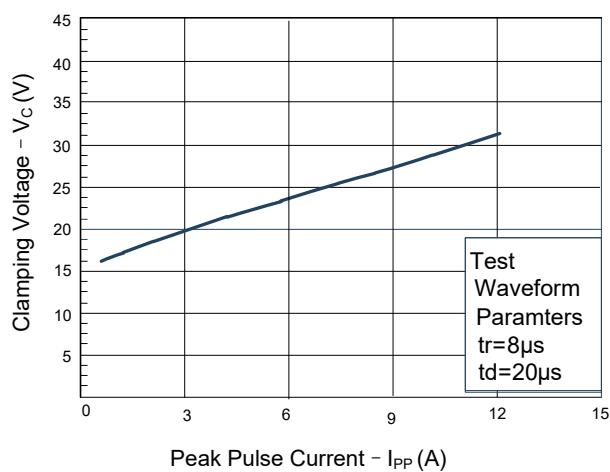
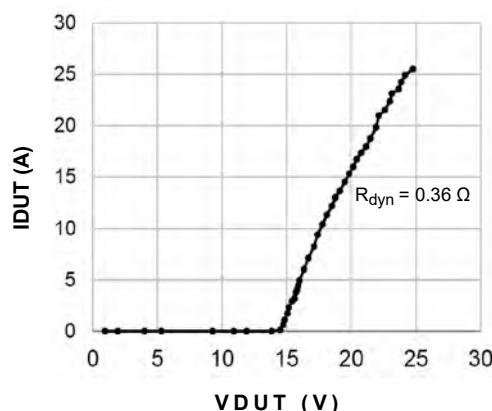
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	350	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	30/30	kV
Peak Pulse Current ($T_p = 8/20\mu s$)	I_{PP}	11	A
Junction Temperature	T_J	-55 to +150	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

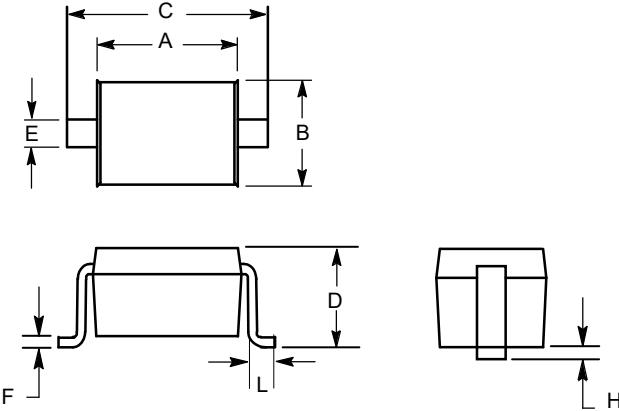
($T_A = 25$ °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				12	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1mA$	13.3	14		V
Reverse Leakage Current	I_R	$V_R=12V$			1	uA
Clamping Voltage (IEC 61000-4-5)	V_C	$I_{PP}=11A$		30		V
Dynamic Resistance	R_{dyn}	$T_p=100ns$		0.36		Ω
Junction Capacitance	C_J	$V_R=0V, f=1MHz$		1		pF

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

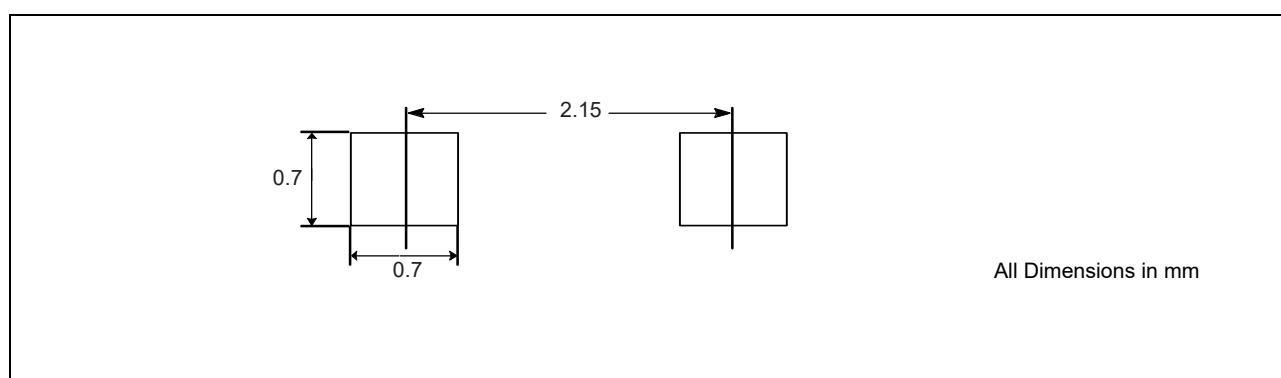
Figure 1: Peak Pulse Power vs. Pulse Time

Figure 2: Power Derating Curve

Figure 3: Pulse Waveform

Figure 4: Clamping Voltage vs.I_{pp}

Figure 5: Positive Clamping voltage (TLP)


Package Dimensions

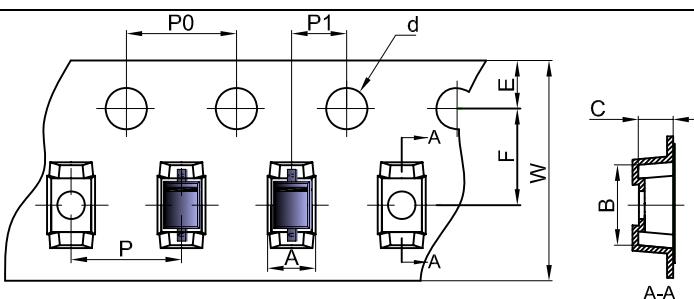


Dim	millimeters	
	min	max
A	1.60	1.90
B	1.15	1.45
C	2.39	2.70
D	0.80	1.00
E	0.25	0.40
F	0.10	0.20
H		0.10
L	0.20	

PAD Dimension



Package Information



Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOD-323	1.46	2.90	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
(Tolerance)	+/-0.05	+/-0.05	+/-0.05	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+0.3/-0.1

Marking**Ordering information**

Order code	Package	Packaging option	Base quantity	Packaging specification
YELSD321211AG	SOD-323	Tape and reel	3000pcs / reel	EIA STD RS-481