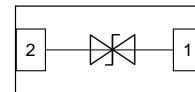


Features

- 60Watts peak pulse power ($t_p = 8/20\mu s$)
- Tiny DFN0603-2 package
- Bidirectional configurations
- R2R + Zener technology
- Low clamping voltage
- Low leakage current
- Ultra low capacitance ($C_j=0.2pF$ typ.)
- Protection one data/power line to:
 IEC 61000-4-2 $\pm 18kV$ contact $\pm 18kV$ air
 IEC 61000-4-4 (EFT) 40A (5/50ns)
 IEC 61000-4-5 (Lightning) 3.5A (8/20 μs)



Mechanical Data

- **Case:** DFN0603-2 (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

- USB3.0/3.1, Type C, Firewire, DVI, HDMI, S-ATA
- Thunderbolt, Display Port
- Mobile HDMI Link, MDDI, MIPI, SWP / NFC

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

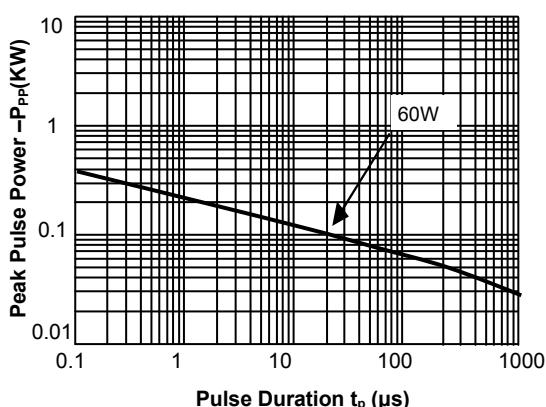
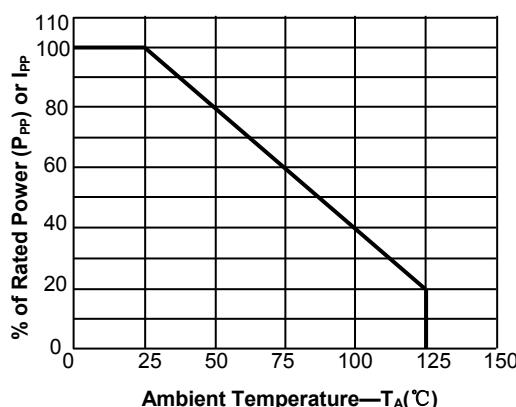
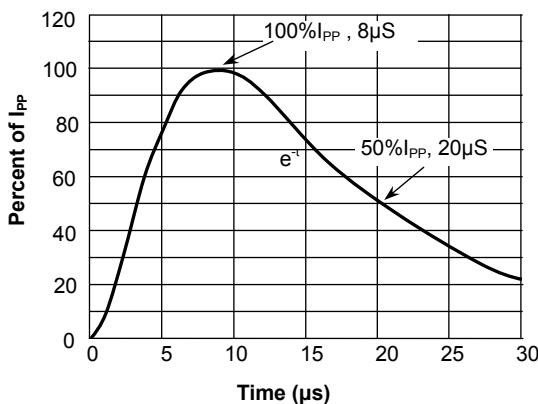
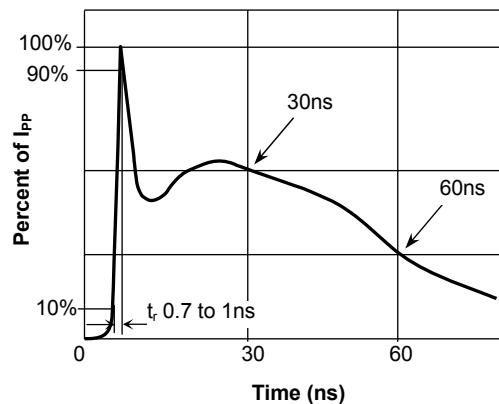
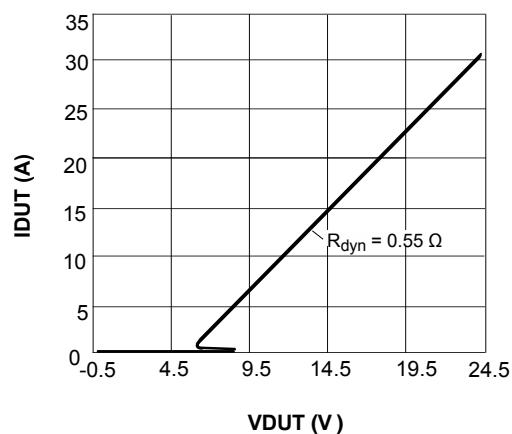
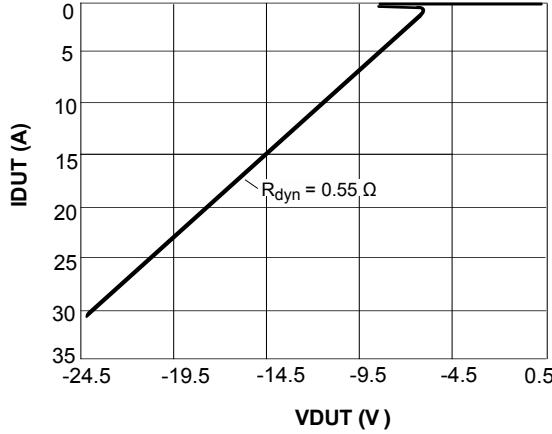
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p=8/20\mu s$)	P_{PP}	60	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	18/18	kV
Peak Pulse Current ($T_p = 8/20\mu s$)	I_{PP}	3.5	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C
Maximum Lead Solder Temperature(10 second duration)	T_L	260	°C

Electrical Characteristics

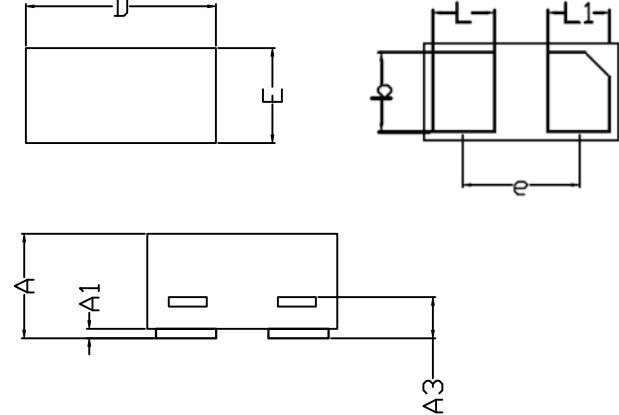
($T_A = 25$ °C unless otherwise specified)

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			V
Reverse Leakage Current	I_R	$V_{RWM}=5V$			100	nA
Clamping Voltage	V_C	$I_{PP}=3.5A, T_p=8/20\mu s$		15		V
Clamping Voltage(TLP)	V_C	$I_{PP}=16A, T_p=100ns$			15	V
Dynamic Resistance	R_{dyn}	$T_p=100ns$		0.55		Ω
Junction Capacitance	C_J	$V_R=0V, f=1MHz$		0.2		pF

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

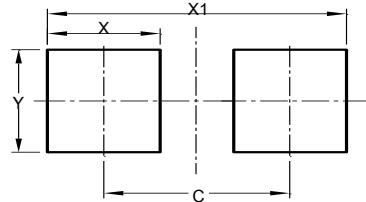
Fig.1 Peak Pulse Power Rating Curve

Fig.2 Pulse Derating Curve

Fig.3 Pulse Waveform-8/20μs

Fig.4 Pulse Waveform-ESD(IEC61000-4-2)

Figure5: Positive Clamping voltage (TLP)

Figure6: Negative Clamping voltage (TLP)


Package Dimensions



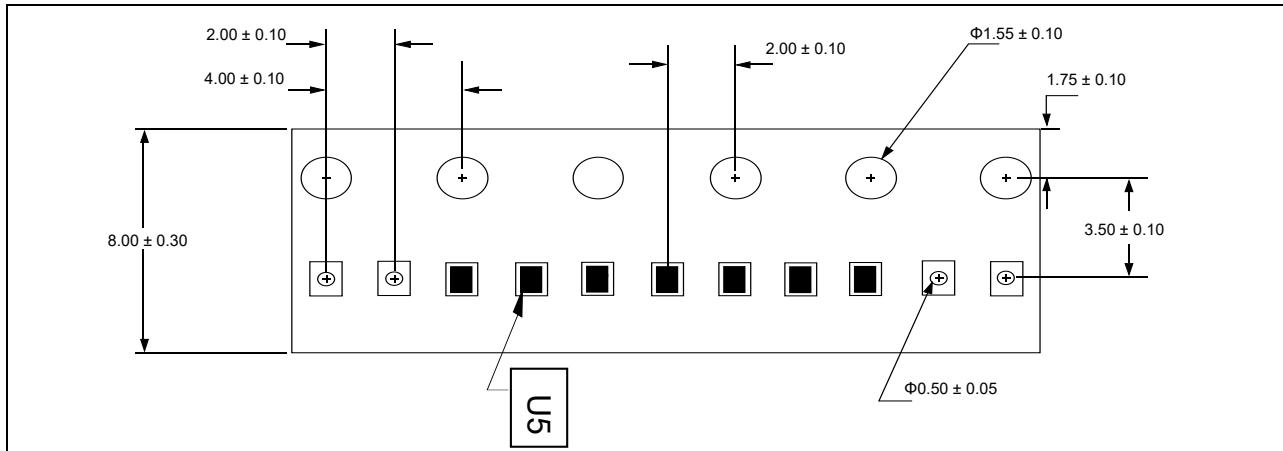
Symbol	Dimensions in millimeters		
	Min	Nom	Max
A	0.23	-	0.33
A1	0.00	-	0.05
A3 0.102 REF			
D	0.55	0.60	0.65
E	0.25	0.30	0.35
b	0.215	0.245	0.275
L	0.160	0.190	0.220
L1	0.160	0.190	0.220
e	0.355 BSC		

Pad Dimensions



Dimensions	Value (mm)
C	0.380
X	0.230
X1	0.610
Y	0.300

Package Information



Ordering information

Order code	Marking	Package	Packaging option	Base quantity	Packaging specification
YEUD062053A5G	U5	DFN0603-2	Tape and reel	10000pcs / reel	EIA STD RS-481