YEUD0621802AB

ESD Protection Diode

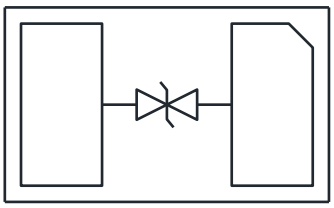
Features

- 80W peak pulse power (8/20μs)
- Operating voltage: 18V
- Ultra low leakage: nA level
- Low clamping voltage
- low capacitance
- IEC61000-4-2 (ESD) ±25kV (air), ±15kV (contact)
- IEC61000-4-5 (Lightning) 2A (8/20μs)
- RoHS Compliant

Mechanical Characteristics

- Case: Molded plastic, DFN0603-2
- Case Material: “Green” Molding Compound
- Moisture Sensitivity: Level 3 per J-STD-020

Pin Configuration



Marking Code

Device Marking Code
= PZ

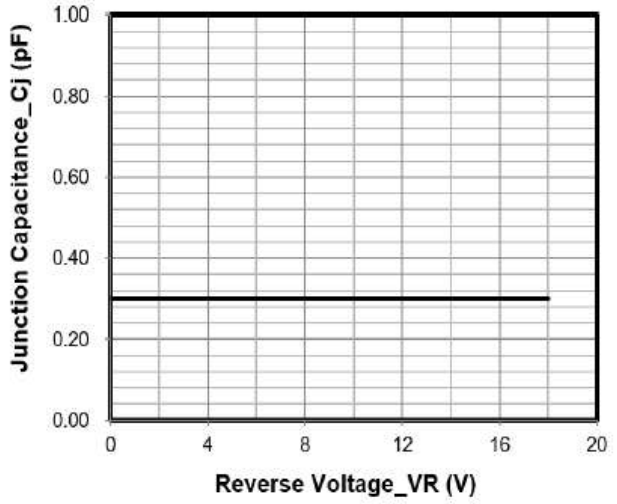
Absolute Maximum Ratings (T_A=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (tp=8/20μs waveform)	P_{PPM}	80	W
Peak Pulse Current (tp=8/20μs waveform)	I_{PP}	2	A
ESD per IEC 61000−4−2 (Air) ESD per IEC 61000−4−2 (Contact)	V_{ESD}	±25 ±15	kV
Operating Temperature Range	T_J	−55 to +125	°C
Storage Temperature Range	T_{STG}	−55 to +150	°C

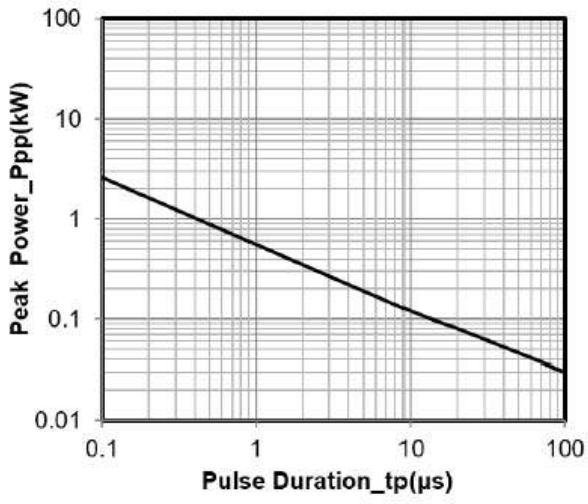
Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Test Condition	Symbol	Min	Typ	Max	Unit
Reverse Working Voltage		V_{RWM}			18	V
Breakdown Voltage	I_T = 1mA	V_{BR}	19.5			V
Reverse Leakage Current	V_{RWM} = 18V	I_R			0.2	μA
Clamping Voltage	I_{PP} = 2A (8 x 20μs pulse)	V_C			40	V
Junction Capacitance	V_R = 0V, f = 1MHz	C_J		0.3		pF

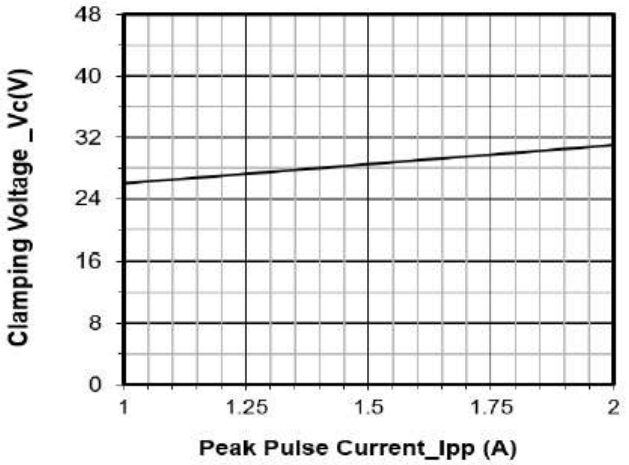
Typical Performance Characteristics (T_A=25°C unless otherwise specified)



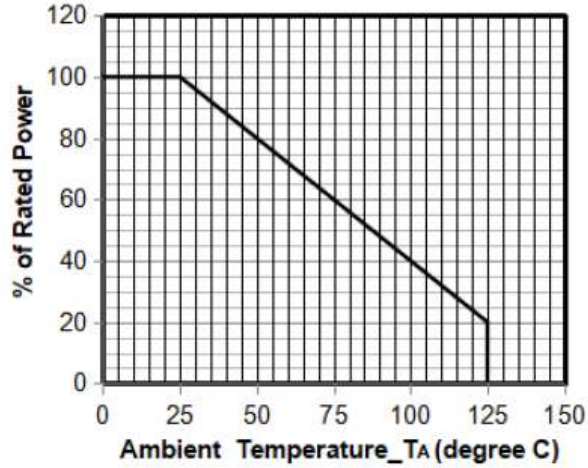
Junction Capacitance vs. Reverse Voltage



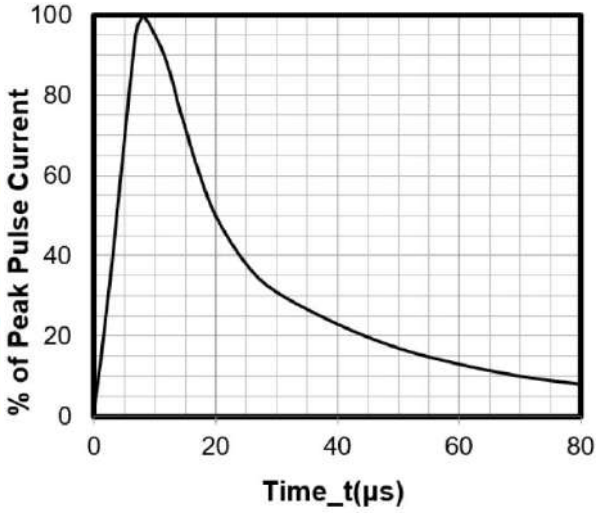
Peak Pulse Power vs. Pulse Time



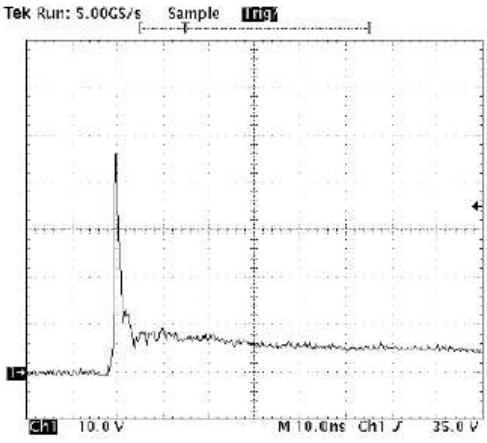
Clamping Voltage vs. Peak Pulse Current



Power Derating Curve



8 X 20µs Pulse Waveform

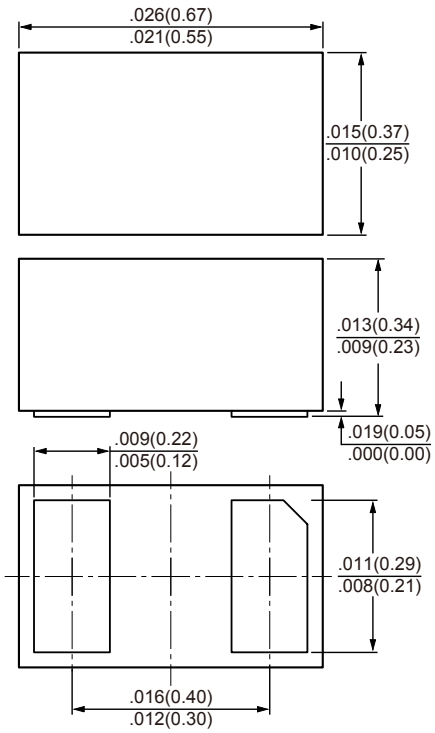


ESD Clamping Voltage

8 kV Contact per IEC61000-4-2

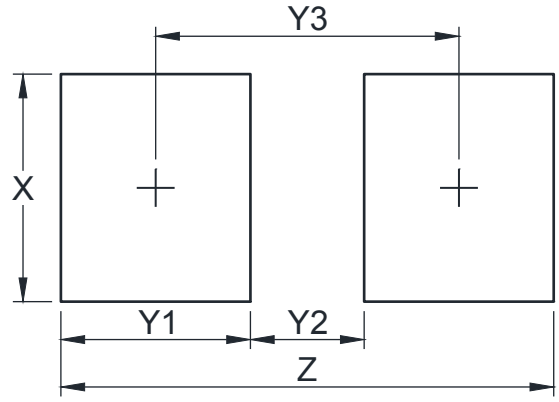
Structures and Dimensions

DFN0603-2



Dimensions in inches and (millimeters)

Recommended Soldering Pad Dimensions



Package Type	X	Y1	Y2	Y3	Z
DFN0603-2	0.30	0.25	0.15	0.40	0.65

Unit: mm

Quantity

Part Number	Package	Reel Size (inch)	Reel (Kpcs)
YEUD0621802AB	DFN0603-2	7	10