

Features

- 1200 Watts peak pulse power ($t_p = 8/20\mu s$)
- DFN1608-2 package
- Unidirectional configurations
- Solid-state silicon-avalanche technology
- Low clamping voltage
- Low leakage current
- Normal capacitance ($C_j = 150pF$)
- Meet MSL level1, per J-STD-020, LF maximum peak of 260°C
- JESD22-A114-B ESD Voltage:HBM 30KV
- ESD Voltage :MM 0.4KV
- ESD Voltage :CDM 0.5KV
- 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) 23A (8/20 μs)



Mechanical Data

- **Case:** DFN1608-2 (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

- Computers and peripherals
- Digital Cameras
- Audio and video equipment
- Cellular handsets and accessories
- Portable electronics
- Power supply protection

Absolute Maximum Ratings

Ratings at 25 °C, ambient temperature unless otherwise specified

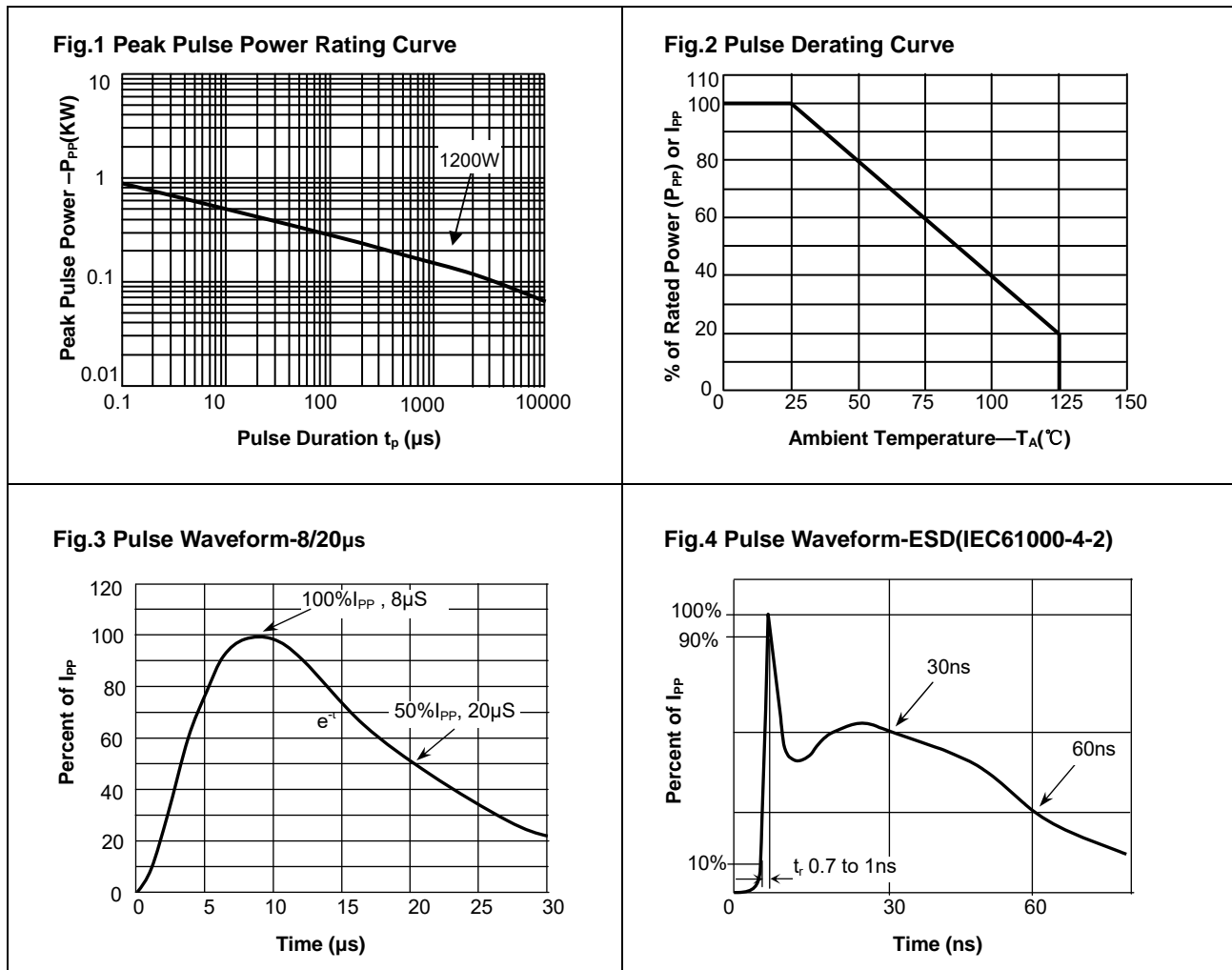
Parameter	Symbol	Value	Unit
Peak Pulse Power ($T_p = 8/20\mu s$)	P_{PP}	1200	W
ESD contact/air discharge (IEC-61000-4-2)	V_{ESD}	30/30	kV
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	23.0	A
Junction Temperature	T_J	-55 to +125	°C
Storage temperature	T_{STG}	-55 to +150	°C

Electrical Characteristics

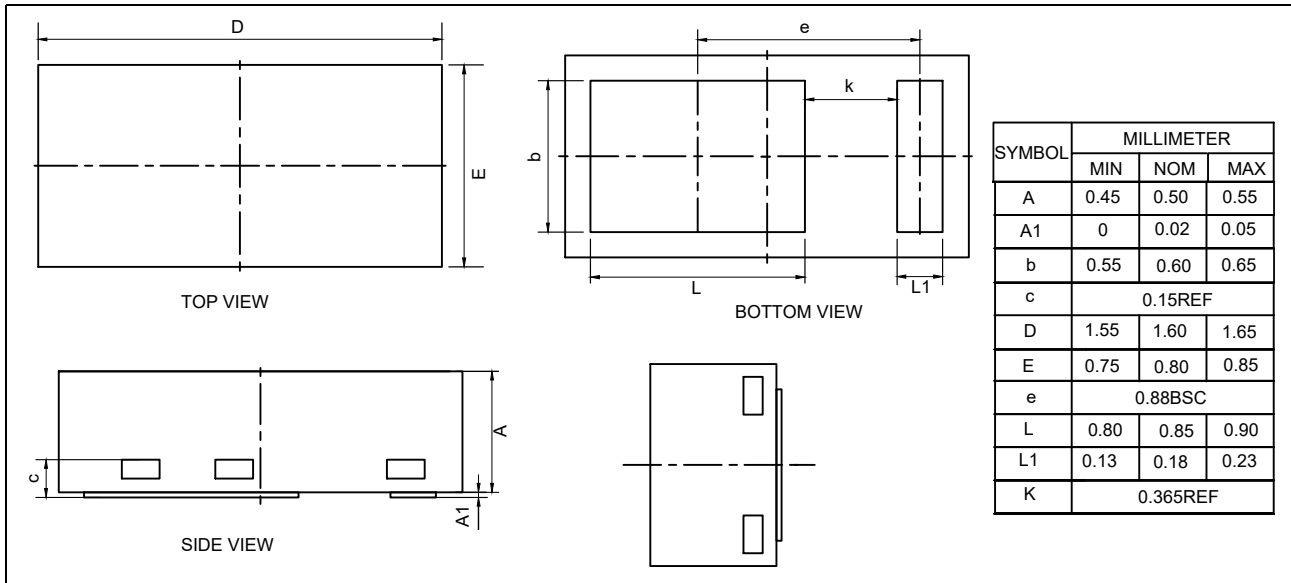
($T_A = 25$ °C unless otherwise specified)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				24	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	27	30	36	V
Reverse Leakage Current	I_R	$V_R = 24V$			0.1	μA
Clamping Voltage (IEC 61000-4-5)	V_C	$I_{PP} = 23A$			65	V
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$		150	160	pF

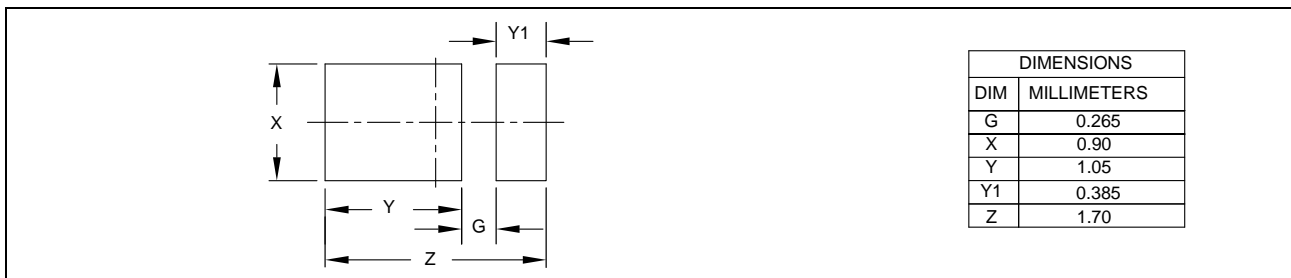
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



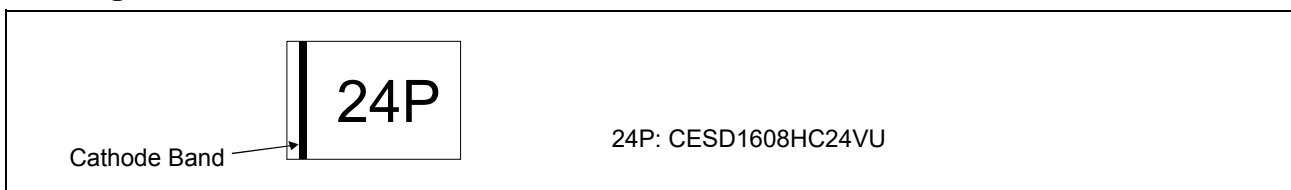
Package Dimensions



Pad Dimensions



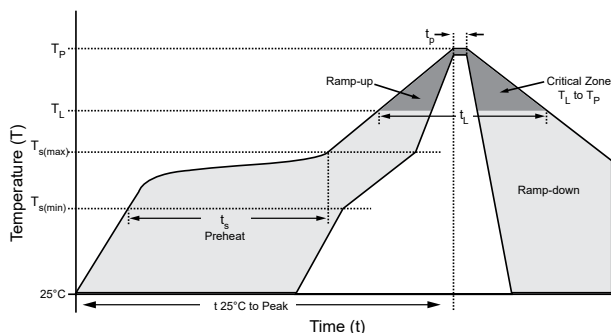
Marking



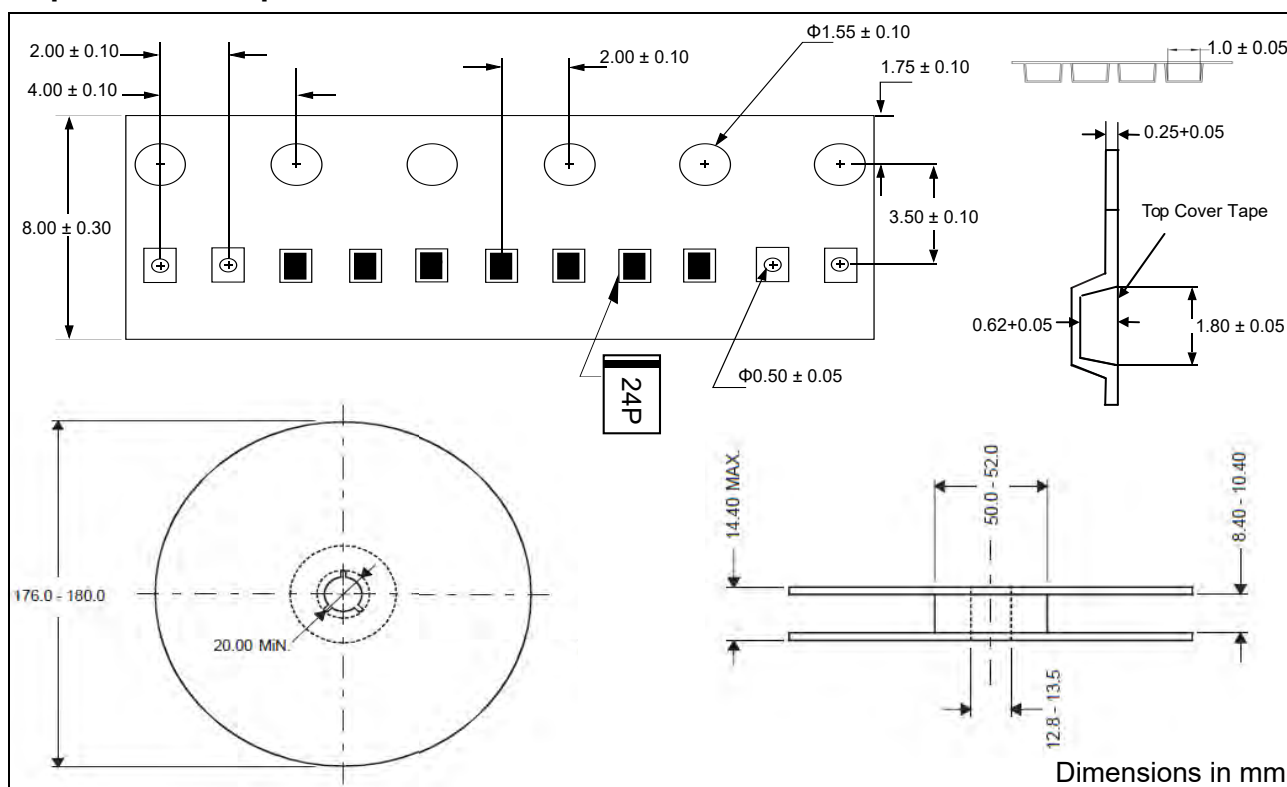
Suggested thermal profile for soldering process

1. Storage environment : Temperature=5~40°C Humidity=55±25%
2. Reflow soldering of surface-mount device
3. Reflow soldering

Profile Feature	Soldering Condition
Average ramp-up rate(T_L to T_P)	<3°C/sec
Preheat	
- Temperature Min(T_{smin})	150°C
- Temperature Max(T_{smax})	200°C
- Time(min to max)(t_s)	60~120sec
T_{smax} to T_L	
- Ramp-up Rate	<3sec
Time maintained above:	
- Temperature (T_L)	217°C
- Time(t_L)	60-260sec
Peak Temperature(T_P)	255 -0/+5°C
Time within 5°C of actual Peak Temperature(T_P)	10~30sec
Ramp-down Rate	<6°C/sec
Time 25°C to Peak Temperature	<6minutes



Tape and Reel Specification



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
YED16H22423AV	DFN1608-2	Tape and reel	3000pcs / reel	EIA STD RS-481