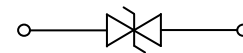


Features

- 150 Watts peak pulse power ($t_p = 8/20\mu s$)
- DFN1006 package
- Bidirectional configurations
- Protects one I/O port
- Low clamping voltage
- Low Leakage current
- ESD-immunity acc. IEC 61000-4-2 $\pm 8kV$ contact
 $\pm 15kV$ air
- IEC 61000-4-4 (EFT) 40A (5/50ns)



DFN1006 (0402)



Schematic Diagram

Applications

- Audio Line, Speaker, Headset, Microphone Protection
- Human Interface Devices (Keyboard, Touchpad, Buttons)

Absolute Maximum Ratings

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	150	W
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	9.4	A
Junction Temperature	T_J	-55 to +125	$^\circ C$
Storage temperature	T_{STG}	-55 to +150	$^\circ C$
ESD per IEC 61000-4-2 (Air)	V_{ESD}	± 15	kV
ESD per IEC 61000-4-2 (Contact)		± 8	kV

Electrical Characteristics

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

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	5.0	6.8		V
Reverse Leakage Current	I_R	$V_R = 5V$			1	μA
Clamping Voltage	V_C	$I_{PP} = 5A, T_p = 8/20\mu s$			11.6	V
	V_C	$I_{PP} = 9.4A, T_p = 8/20\mu s$			18.6	V
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$		15		pF

Typical Characteristic Curves

Fig.1 Peak Pulse Power Rating Curve

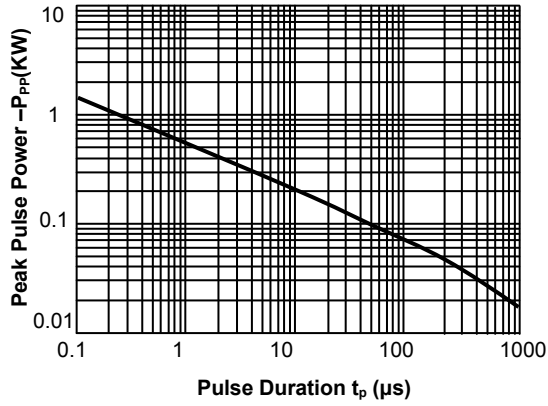


Fig.2 Pulse Derating Curve

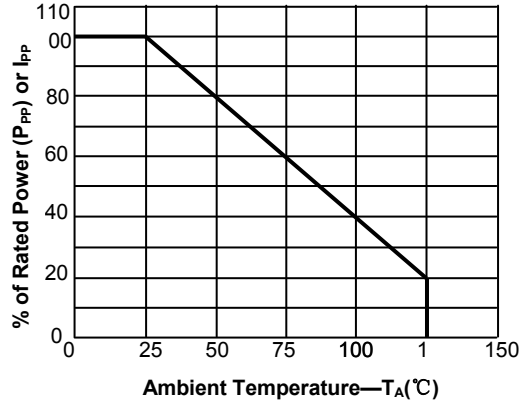


Fig.3 Pulse Waveform-8/20μs

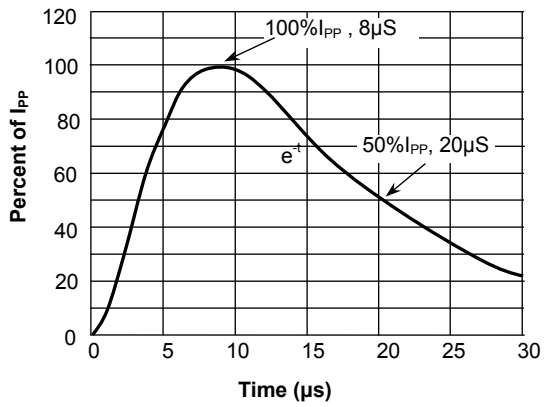
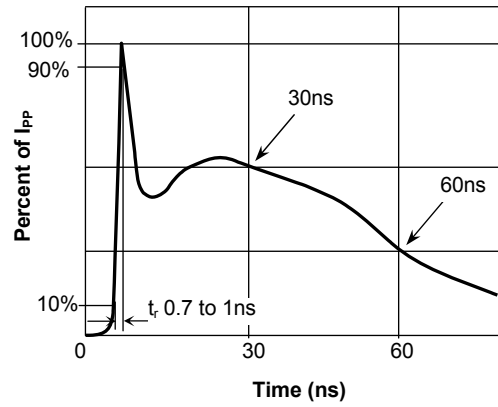
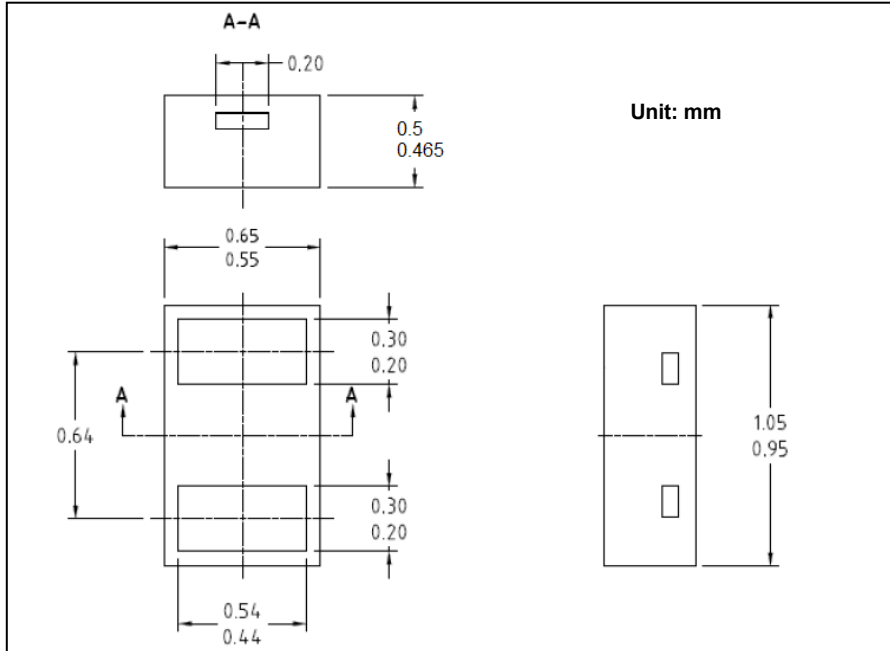


Fig.4 Pulse Waveform-ESD(IEC61000-4-2)



Product Dimensions



Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
GSES5VD1006-2B	DFN1006	C	Tape & Reel	10000pcs / Reel	RoHS compliant