

Features

- Ultra small SMD package:DFN1006 (0402)
- Low clamping voltage
- Low leakage current
- Uni-directional ESD protection
- IEC61000-4-2 Level 4 ESD Protection



DFN1006 (0402)

Applications

- Notebooks, Desktops, Servers
- Projection TV
- Cellular Handsets and Accessories
- Portable Instrumentation
- Peripherals



Schematic Diagram

Absolute Maximum Ratings

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($t_P=8/20\mu\text{S}$)	P_{PP}	135	W
Peak Pulse Current ($t_P = 8/20\mu\text{S}$)	I_{PP}	10	A
Junction Temperature	T_J	-55 to +125	$^{\circ}\text{C}$
Storage temperature	T_{STG}	-55 to +150	$^{\circ}\text{C}$
ESD per IEC 61000-4-2 (Air)	V_{ESD}	± 15	kV
ESD per IEC 61000-4-2 (Contact)		± 8	kV

Electrical Characteristics

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

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Reverse stand-off Voltage	V_{RWM}	-	-	-	5	V
Reverse Breakdown Voltage	V_{BR}	$I_T=1\text{mA}$	6.0	-	-	V
Reverse Leakage Current	I_R	$V_R=5\text{V}$	-	-	1	μA
Clamping Voltage	V_C	$I_{PP}=10\text{A}, T_P=8/20\mu\text{S}$	-	-	13.5	V
Junction Capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$	-	80	-	pF

Typical Characteristic Curves

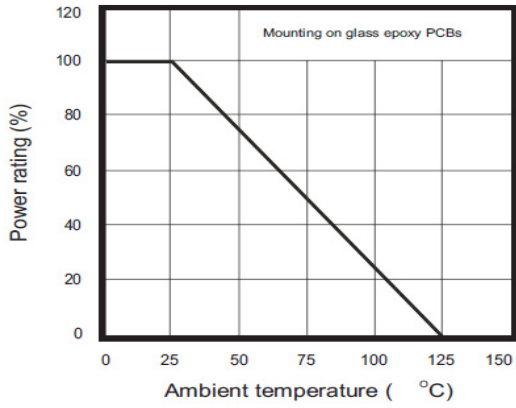


Fig 1 : Junction Capacitance V.S Reverse Voltage Applied

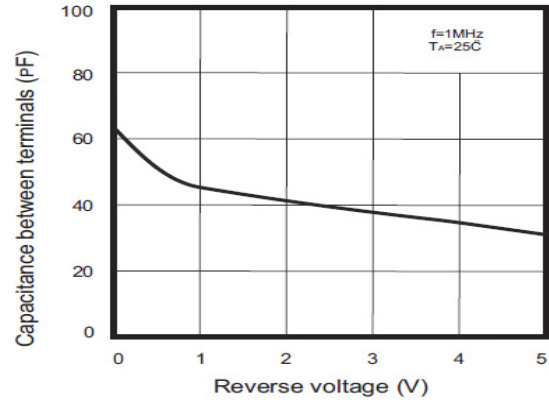


Fig 2 : Peak Plus Power V.S Exponential Plus Duration

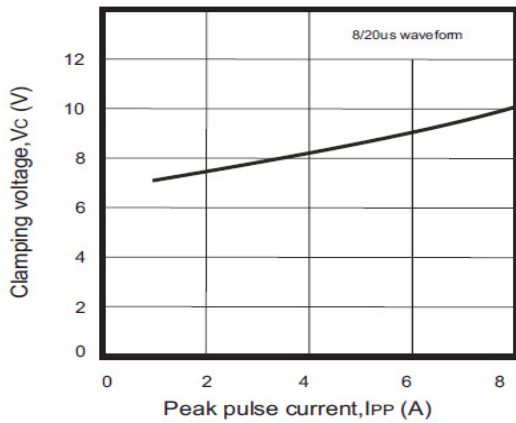


Fig 3: Clamping Voltage VS Peak Pulse Current

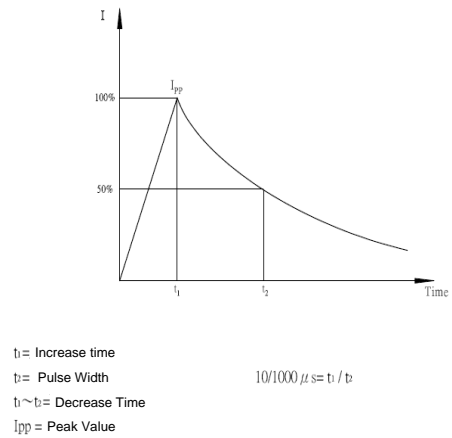
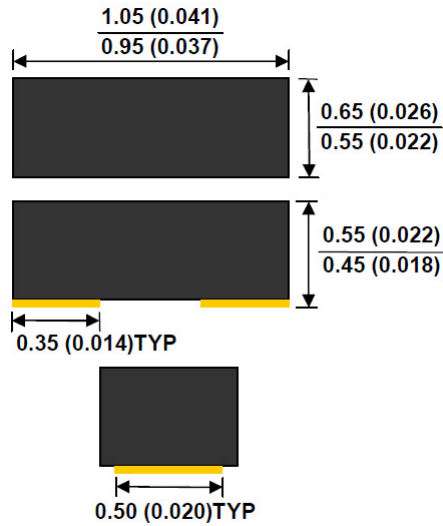


Fig 4 : Forward Voltage Drop V.S Peak Forward Current

Product Dimensions



Dimensions in millimeter and (inches)

Order Information

Device	Package	Marking	Carrier	Quantity	HSF Status
SPES5VD1006-2U	DFN1006-2	5U	Tape & Reel	5000pcs / Reel	RoHS compliant