

Ultra Low Capacitance ESD Protection Diode

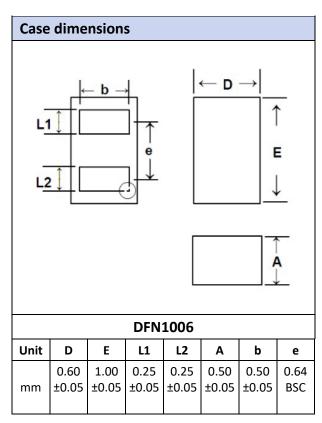
Primary characteristics						
Parameter	Symbol	Value	Unit			
ESD per IEC 61000-4-2 (contact)	V _{ESD}	±20	kV			
ESD per IEC 61000-4-2 (air)	V _{ESD}	±20	kV			
Peak pulse power (8/20μs)	P _{PP}	100	W			
Junction capacitance (typ.)	Cı	0.25	pF			

Features

- **DFN1006** case for easy automatic insertion.
- Pb-free and RoHS compliant
- Halogen free
- Low junction capacitance
- Low leakage current
- Low clamping voltage
- Flammability Rating: UL 94V-0
- High temperature soldering guaranteed: 260°C/10s

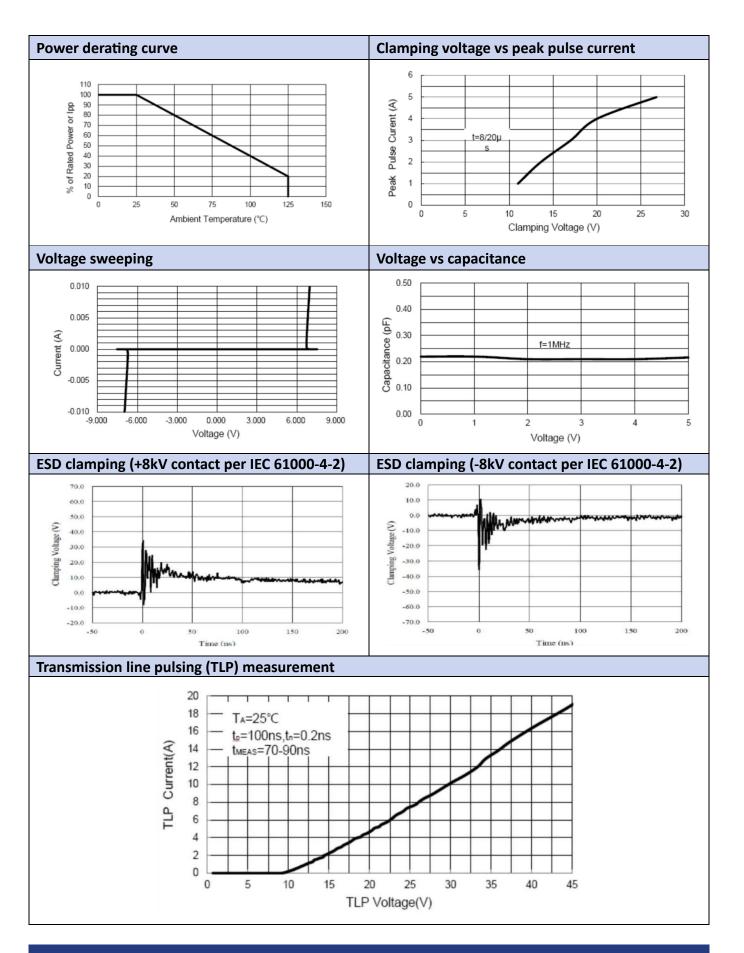
Applications

- Serial ATA
- Desktops, servers and notebooks
- Cellular phones
- MDDI ports
- USB data line protection
- Display ports

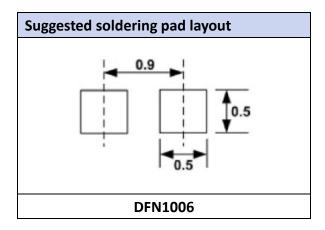


Maximum ratings and electrical characteristics (T _a = 25°C)							
Characteristics	Test condition	Symbol	Value			l l mit	
			Min.	Тур.	Max.	Unit	
ESD per IEC 61000-4-2 (contact)		.,	20		. 20	137	
ESD per IEC 61000-4-2 (air)	-	V_{ESD}	-20	-	+20	kV	
Peak pulse power (8/20μs)	-	P _{PP}	-	-	100	W	
Operating temperature	-	Торт	-55	-	125	°C	
Storage temperature	-	T _{STG}	-55	-	150	°C	
Reverse working voltage	-	V_{RWM}	-	-	5.0	V	
Reverse breakdown voltage	I _T =1mA	V_{BR}	6.0	-	-	V	
Reverse leakage current	V _{RWM} =5V	I _R	-	-	100	nA	
Clamping valtage	I _{PP} =1A, t _p =8/20μs	Vc	-	-	13	V	
Clamping voltage	I _{PP} =4A, t _p =8/20μs		-	18	25	V	
TID also are in a continuo	IPP=8A, IEC61000-4-2 level 2 equivalent (±4kV contact, ±8kV air)	V contact, ±8kV air)	-	26	-	V	
TLP clamping voltage	IPP=16A, IEC61000-4-2 level 4 equivalent (±8kV contact, ±16kV air)	VCTLP	-	38	-	V	
Junction capacitance	V _R =0V, f=1MHz	C _J		0.25	0.40	pF	









Ordering information							
Part Number	Package	Shipping Quantity	Dimensions				
ESD0501BU	DFN1006	10 000 pcs / reel					

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