

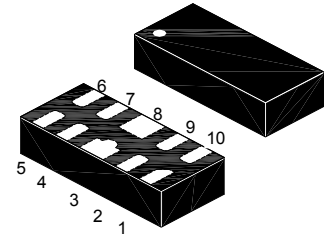
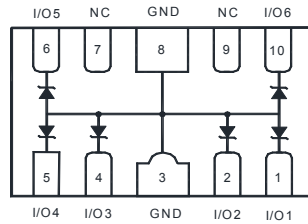
ESD0501MP

Transient Voltage Suppressors

for ESD Protection

Features

- Excellent clamping capability
- Low leakage
- Fast response time



1. I/O1 2. I/O2 3. GND 4. I/O3 5. I/O4
6. I/O5 7. NC 8. GND 9. NC 10. I/O6
Marking Code: "0501"
DFN2510-10 Plastic package

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Stand-Off Voltage	V_R	5	V
Peak Pulse Current ($t_p = 8/20 \mu\text{s}$)	I_{PP}	16	A
IEC61000-4-2 (ESD) Air Contact	V_{PP}	± 20 ± 15	KV
Peak Pulse Power ($t_p = 8/20 \mu\text{s}$)	P_{PK}	200	W
Operation Temperature Range	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 1 \text{ mA}$	$V_{(BR)R}$	6	-	V
Forward Voltage at $I_F = 10 \text{ mA}$	V_F	-	0.9	V
Reverse Current at $V_R = 5 \text{ V}$	I_R	-	1	μA
Clamping Voltage at $I_{PP} = 5 \text{ A}$, $t_p = 8/20 \mu\text{s}$ at $I_{PP} = 16 \text{ A}$, $t_p = 8/20 \mu\text{s}$	V_C	- -	9.8 12.5	V
Junction Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$	C_j	-	160	pF

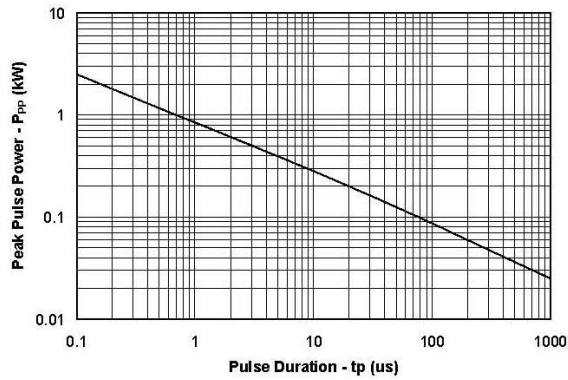
TOP DYNAMIC



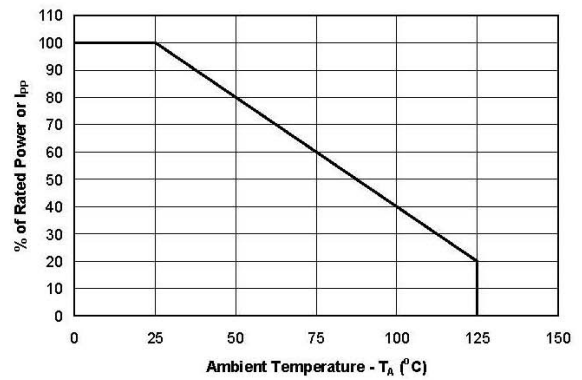
ISO14001 : 2004 Certificate No. 121505007
ISO 9001 : 2008 Certificate No. 50114012
OHSAS 18001 : 2007 Certificate No. 05131508008
IECQ QC 080000 Certificate No. EQN100011402

Dated: 15/08/2016 Rev: 03

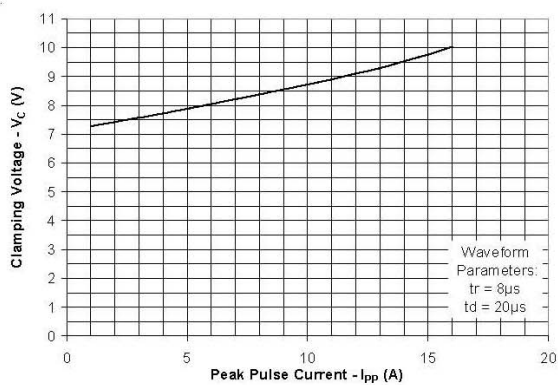
Non-Repetitive Peak Pulse Power vs. Pulse Time



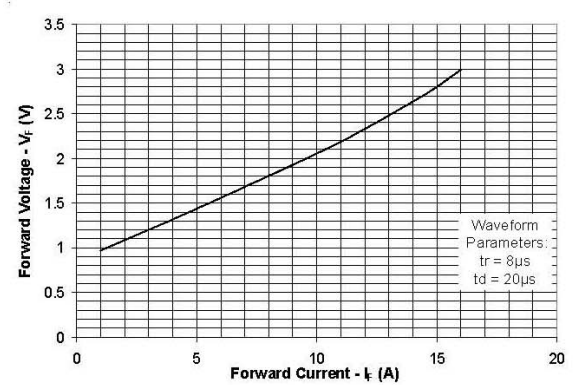
Power Derating Curve



Clamping Voltage vs. Peak Pulse Current



Forward Voltage vs. Forward Current

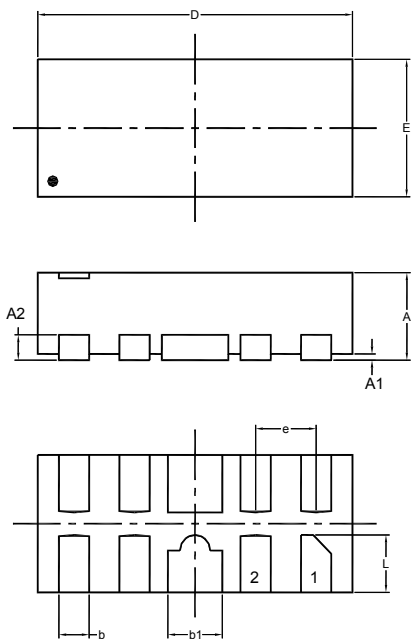


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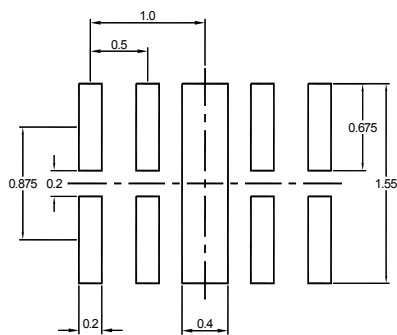
Package Outline Dimensions (Units: mm)

DFN2510-10



UNIT	A	A1	A2	b	b1	D	E	e	L
mm	0.50 0.65	0 0.05	0.13	0.15 0.25	0.35 0.45	2.40 2.60	0.90 1.10	0.50	0.30 0.425

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
DFN2510-10	8	4 ± 0.1	0.157 ± 0.004	178	7	4,000

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