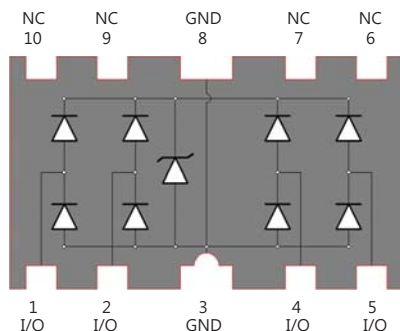


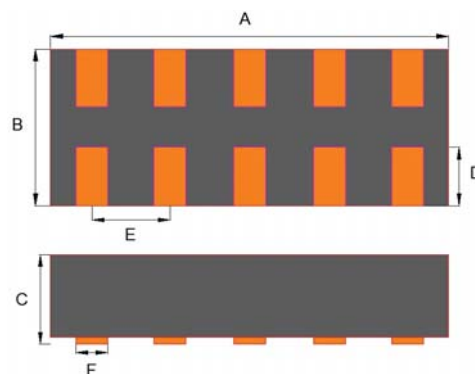


RESDMRA5V0J

5V 4Lines ESD Array



Package Outline



Features

- Meet IEC61000-4-2 (ESD) $\pm 17\text{kV}$ (air), $\pm 12\text{kV}$ (contact)
- Meet IEC61000-4-4 (EFT) rating. 40A (5/50ns)
- Meet IEC61000-4-5 (Lightning) rating. 5A (8/20 μs)
- Protects four high speed I/O lines
- Working Voltage : 5V
- Pb free version, RoHS compliant, and Halogen free

MECHANICAL CHARACTERISTICS

- Case : DFN2510-10 standard package, molded plastic
- Terminal: Au/Sn plated, Lead free,solderable per MIL-STD-202,Method 202 guaranteed
- Working Voltage: 5V
- Marking Code : P524
- MSL : Level 1

Dimensions	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.45	2.55	0.096	0.100
B	0.95	1.05	0.037	0.041
C	0.45	0.55	0.018	0.022
D	0.30	0.40	0.012	0.016
E	0.45	0.55	0.018	0.022
F	0.20	0.40	0.008	0.016

Maximum Rating And Electrical Characteristics (at Ta=25°C unless otherwise noted)

Parameter	Condition	Symbol	Min	Typ	Max	Unit
Peak Pulse Power	$t_p = 8 / 20 \mu\text{s}$ (According to IEC61000-4-5)	Ppp		150		W
Maximum Peak Pulse Current	$t_p = 8 / 20 \mu\text{s}$ (According to IEC61000-4-5)	Ipp		5		A
ESD per IEC 61000-4-2 (Air)		VESD		± 17		kV
ESD per IEC 61000-4-2 (Contact)				± 12		kV
Operating Junction Temperature		Tj	-55		125	°C
Storage Temperature		Tstg	-55		150	°C
Reverse Stand-Off Voltage		VRWM			5	V
Reverse Breakdown Voltage	It = 1mA	VBR	6.0			V
Reverse Leakage Current	VRWM = 5V	IR			1	μA
Clamping Voltage	Ipp = 1A , $t_p = 8/20 \mu\text{s}$	Vc			15	V
Clamping Voltage	Ipp = 5A , $t_p = 8/20 \mu\text{s}$				25	V
Junction Capacitance	Between I/O Pin and GND VR=0V , f=1MHz	Cj		0.6	0.8	pF



Typical Characteristics

FIG 1 Non-Repetitive Peak Pulse Power vs. Pulse Time

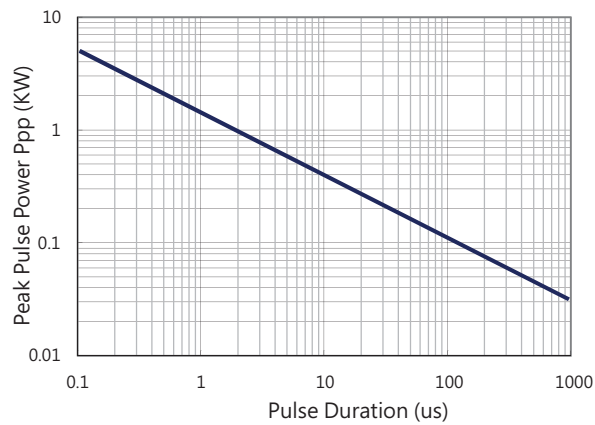


FIG 2 Pulse Waveform

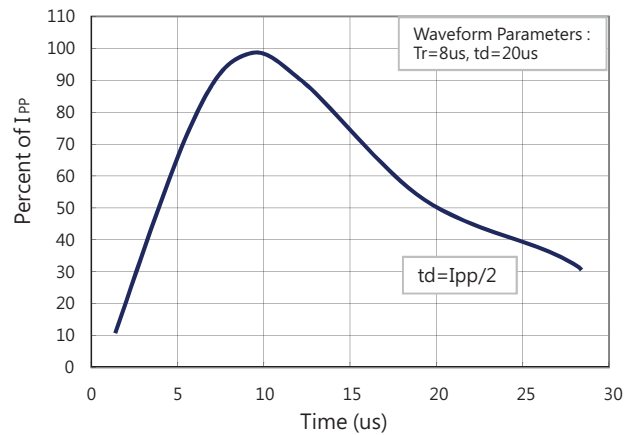


FIG 3 Admissible Power Dissipation Curve

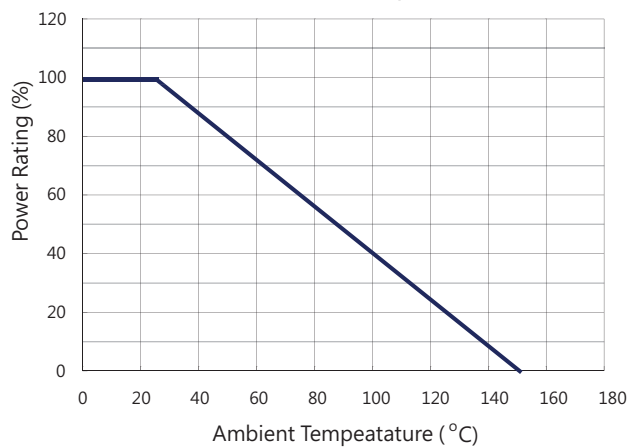


FIG 4 Typical Junction Capacitance

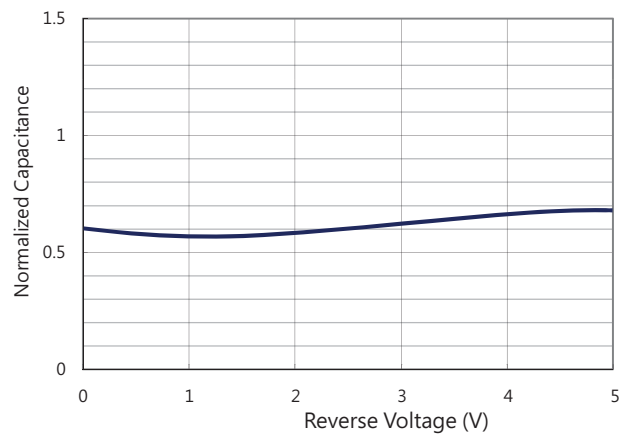


FIG 5 Clamping Voltage vs. Peak Pulse Current

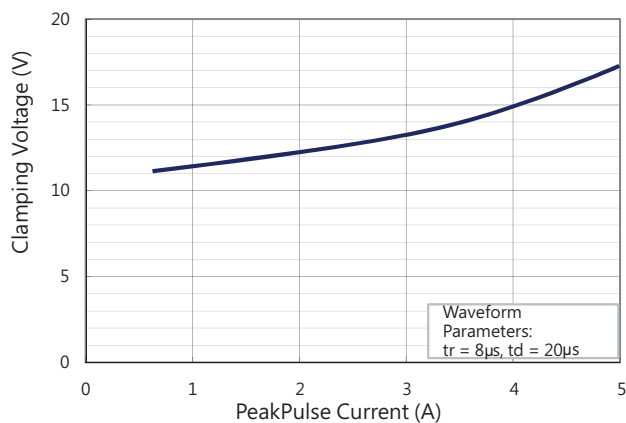


FIG 6 Insertion Loss

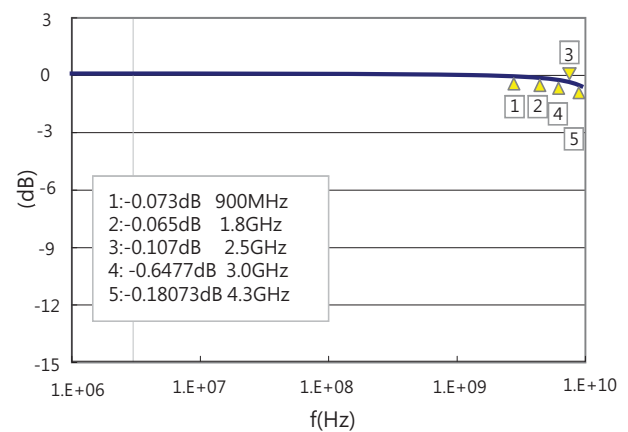
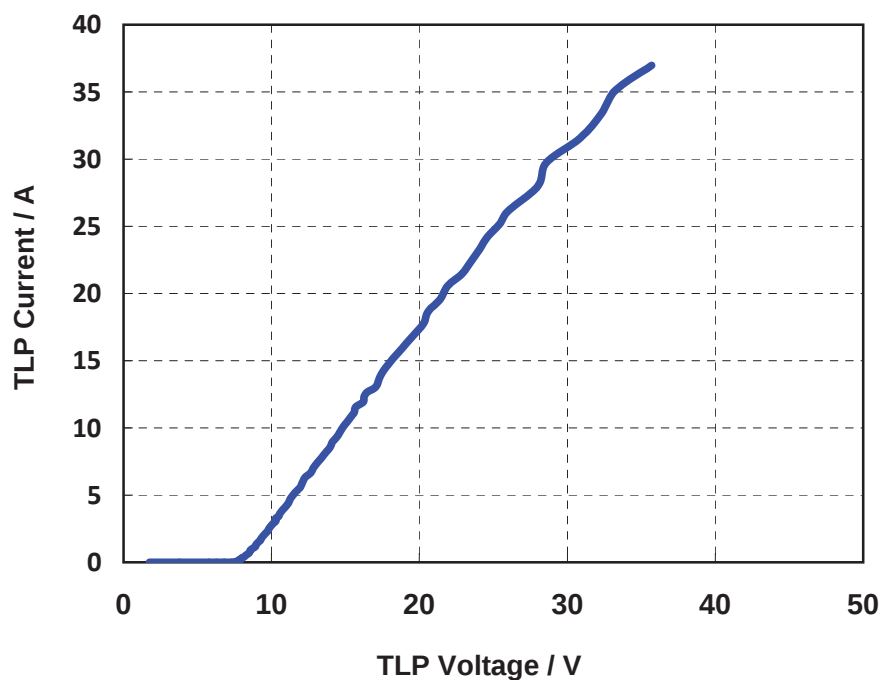


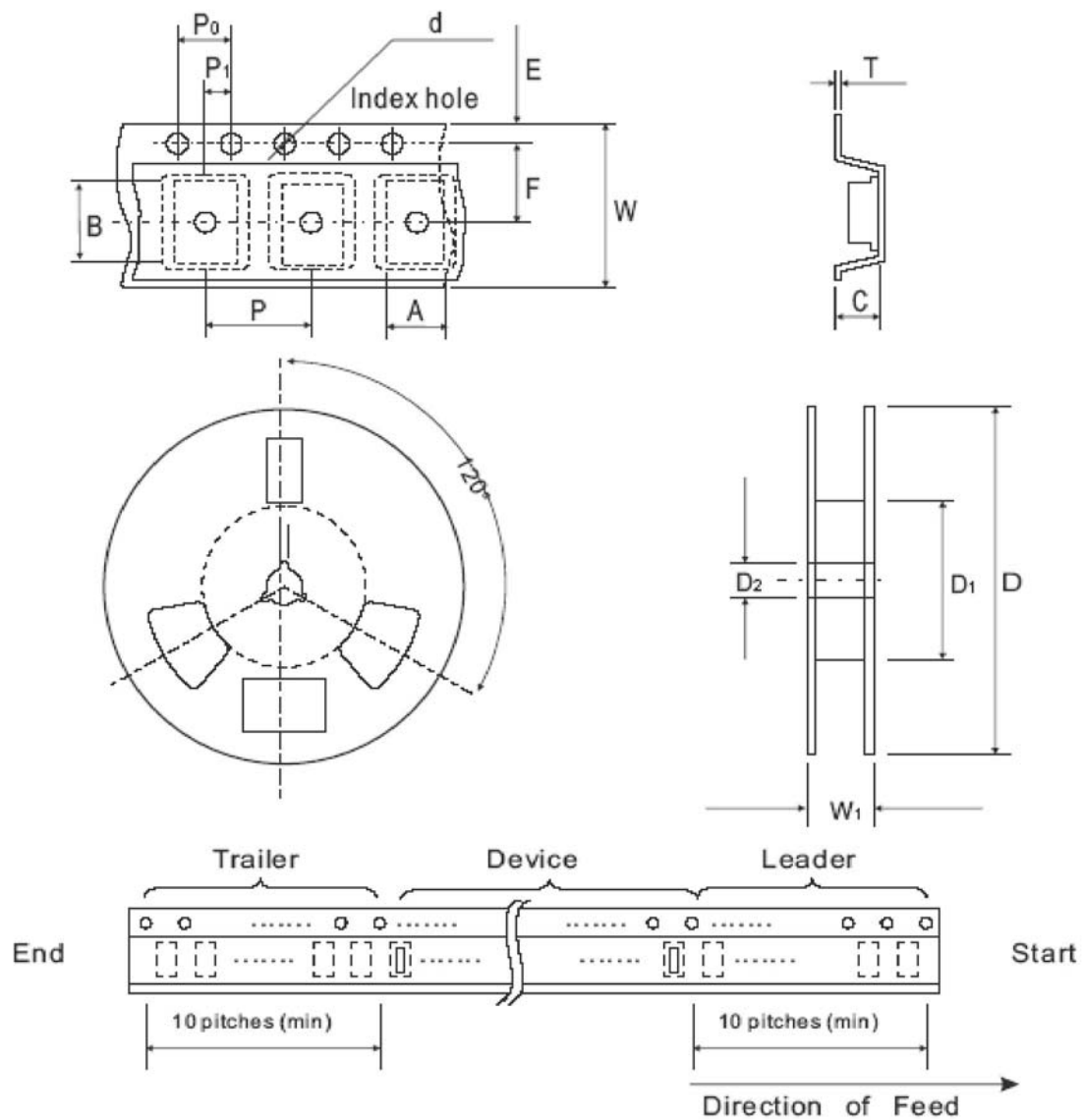


FIG 7 TLP Measurement





Packing Specification



Tape & Reel Dimensions

Package	Unit	A	B	C	d	D	D1	D2
DFN2510	mm	1.15±0.05	2.65±0.05	0.65±0.05	1.55±0.05	178±1	60MIN	13.0±0.20
	inch	0.045±0.002	0.104±0.002	0.026±0.002	0.061±0.002	7.008±0.04	2.362MIN	0.512±0.008

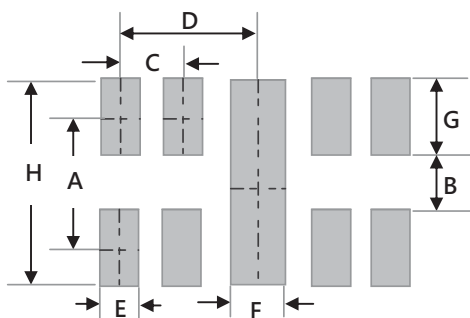
package	Unit	E	F	P	P0	P1	T	W	W1
DFN2510	mm	1.75±0.10	3.5±0.05	4.0±0.10	4.0±0.10	2.0±0.05	0.20±0.02	8.0±0.30	10.5±0.50
	inch	0.069±0.004	0.138±0.002	0.157±0.004	0.157±0.004	0.079±0.002	0.008±0.001	0.315±0.0012	0.413±0.02



Standard Package

Package	Reel Size	Qty/Reel
DFN2510	7"	3,000 pcs

RECOMMENDED SOLDERING FOOTPRINT



Reflow Soldering

Dimensions	Unit (inch)	Unit (mm)
A	0.034	0.88
B	0.008	0.20
C	0.020	0.50
D	0.039	1.00
E	0.008	0.20
F	0.016	0.40
G	0.027	0.68
H	0.061	1.55

Marking Code

Part Number	Marking Code
RESDMRA5V0J	P524

. P524

DISCLAIMERS

These products are not designed for use in applications where any failure or malfunction may resulted in personal injury, death or severe property or environmental damage such as medical, military, aircraft, space or life support equipments.