

Features

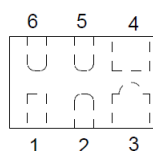
100W(8/20 μ s) Peak Pulse Power
Ultra Low Capacitance ESD Protection
Flow Through DFN1.6x1.0–6L Package
RoHS Compliant
Matte Tin Lead finish (Pb–Free)
Protect Two High Speed Data Lines
Meet IEC61000–4–2 Level 4:
Contact Discharge > 12kV
Air Discharge > 17kV

0522P

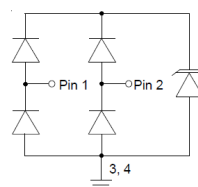
Application

PCI Express
MDDI Ports
eSATA Interfaces
Display Port Interface
Digital Visual Interface (DVI)
High Definition Multi–Media Interface (HDMI)

PIN Diagram



Circuit Diagram



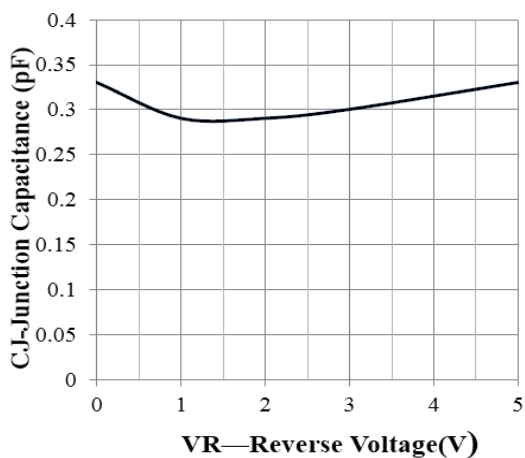
Absolute Maximum Rating

Symbol	Parameter	Value	Unit
PPK	Peak Pulse Power	100	W
IPP	Peak Pulse Current	4.5	A
VESD (Contact)	Contact ESD Voltage per IEC61000–4–2	12	kV
VESD (Air)	Air ESD Voltage per IEC61000–4–2	17	kV
TJ	Junction Temperature	–55 to +125	℃
TSTG	Storage Temperature	–55 to +150	℃

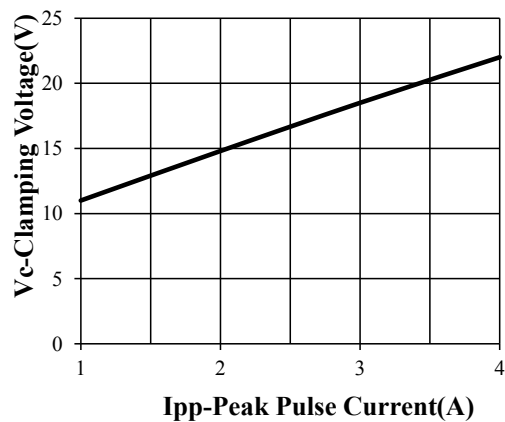
Electrical Characteristics (TA=25°C unless otherwise specified)

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
VRWM	Reverse Working Peak Voltage				5	V
VBR	Reverse Breakdown Voltage	IT = 1mA	6			V
IR	Reverse Leakage Current	VRWM = 5V			1	μA
VC	Clamping Voltage	IPP = 4 . 5 A (8/20μs)			25	V
CJ	Capacitance	VR = 0V, f = 1MHz Between I/O pins			0.5	pF
CJ	Capacitance	VR = 0V, f = 1MHz Any I/O pin to ground			0.9	pF

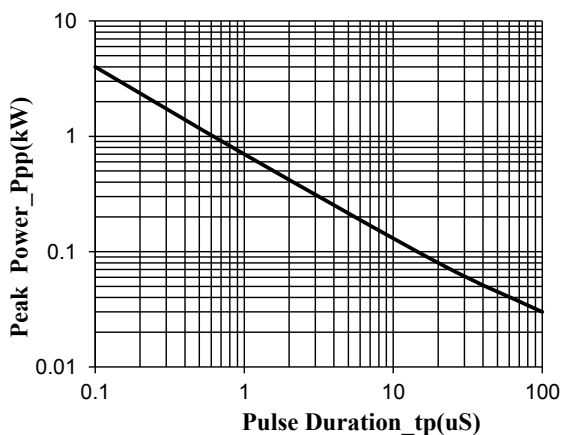
RATING AND CHARACTERISTIC CURVES



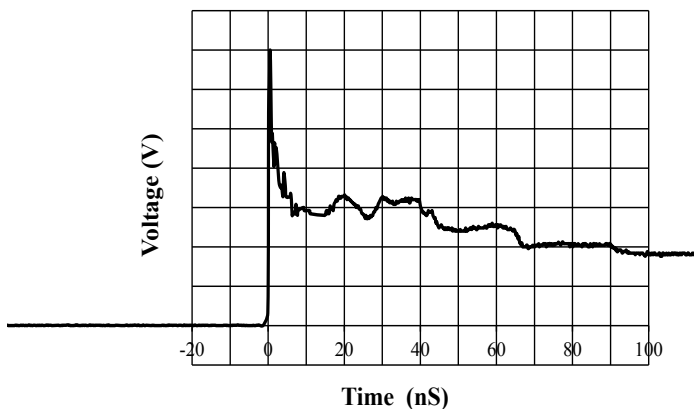
Junction Capacitance vs. Reverse Voltage



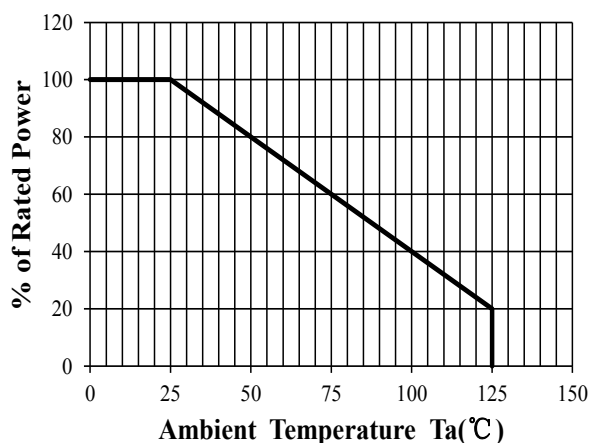
Clamping Voltage vs. Peak Pulse Current



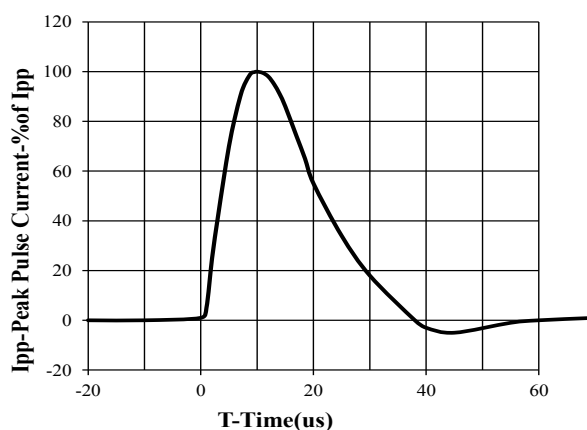
Peak Pulse Power vs. Pulse Time



IEC61000-4-2 Pulse Waveform



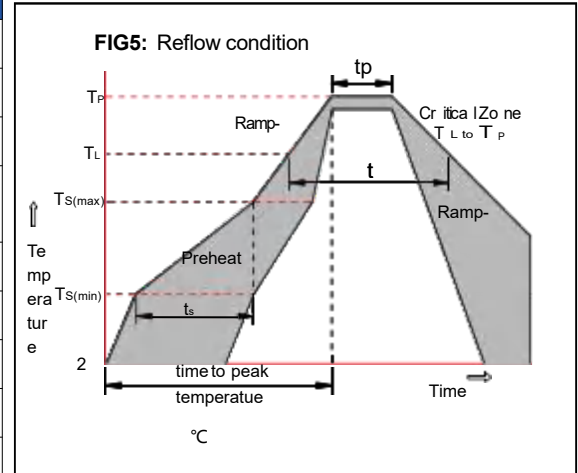
Power Derating Curve



8 X 20us Pulse Waveform

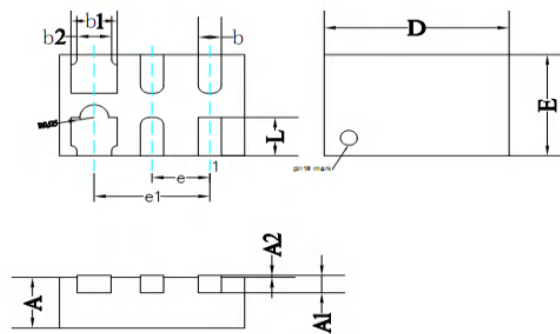
Soldering parameters

Reflow Condition		Pb-Free assembly (see as below)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217°C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C



Package Dimensions & Suggested Pad Layout

DFN1.6X1.0-6L



ALL DIMENSIONS IN MM

	MIN	NOM	MAX
D	1.55	1.60	1.65
E	0.95	1.00	1.05
L	0.33	0.38	0.43
b	0.15	0.20	0.25
b1	0.35	0.40	0.45
b2	0.25	0.30	0.35
e	0.50BSC		
e1	1.00BSC		
A	0.45	0.50	0.55
A1	0.15REF		
A2	0.00	—	0.05

Dimensions in inches and (millimeters)