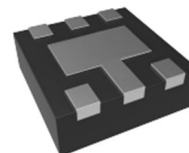


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

DESCRIPTION

- Operating Voltage: 5V
- Ultra-Low Capacitance: 0.8pF (Max.)
- IEC 61000-4-2 (ESD): ±25kV (Air)
- IEC 61000-4-2 (ESD): ±20kV (Contact)
- IEC 61000-4-5 (Lightning): 5A (8/20µs)
- Low Leakage Current
- Low Clamping Voltage

DFN1616-6L



APPLICATIONS

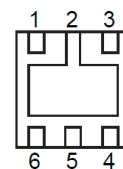
- Multi Media Card Interfaces
- USB 2.0 and USB OTG
- SD Card Interfaces
- Gigabit Ethernet
- MDDI Ports

MARKING

.53P

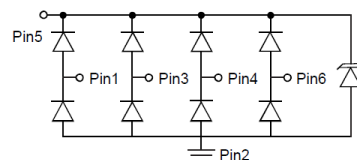
PACKAGE INFORMATION

Package	MPQ	Leader Size
DFN1616-6L	3K	7 inch



ORDER INFORMATION

Part Number	Type
ESTP8005E-C	Lead (Pb)-free and Halogen-free



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

Parameter		Symbol	Value	Unit
IEC 61000-4-2 (ESD)	Air Contact	V_{ESD}	±25	kV
	Contact Discharge		±20	
Peak Pulse Power @ $t_p=8/20\mu\text{s}$		P_{PP}	75	W
Peak Pulse Current @ $t_p=8/20\mu\text{s}$		I_{PP}	5	A
Operating Junction Temperature Range		T_J	-55~125	°C
Storage Temperature Range		T_{STG}	-55~150	

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Reverse Working Voltage	V_{RWM}	-	-	5	V	Pin 5 to GND
Breakdown Voltage	V_{BR}	6	-	-	V	$I_T=1\text{mA}$, Pin 5 to GND
Reverse Leakage Current	I_R	-	-	0.5	μA	$V_{RWM}=5\text{V}$, Pin 5 to GND
Surge Clamping Voltage @ $t_p=8/20\mu\text{s}$	V_C	-	-	10	V	$I_{PP}=1\text{A}$, Any I/O Pin to GND
		-	-	15		$I_{PP}=5\text{A}$, Any I/O Pin to GND
Junction Capacitance	C_J	-	-	0.8	pF	$V_R=0\text{V}$, $f=1\text{MHz}$ Any I/O Pin to GND
		-	-	0.4		$V_R=0\text{V}$, $f=1\text{MHz}$, Between I/O Pins

RATINGS AND CHARACTERISTICS CURVES

FIG. 1-Power Derating Curve

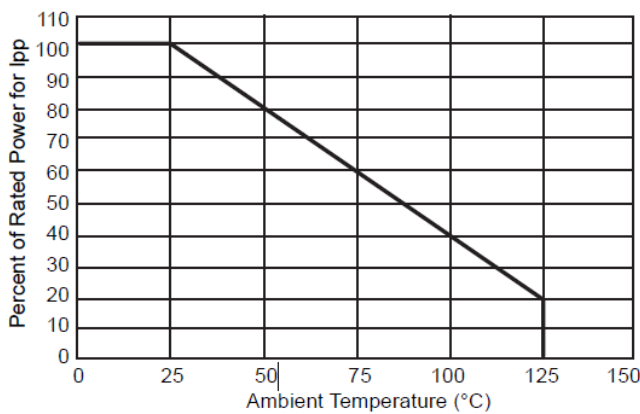


FIG. 2-Junction Capacitance

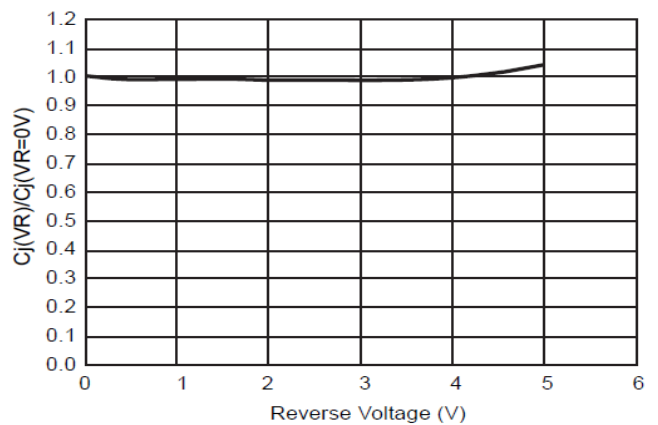


FIG. 3-Clamping Voltage

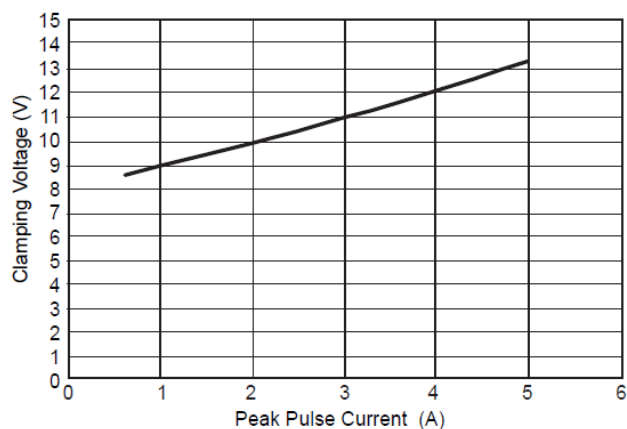
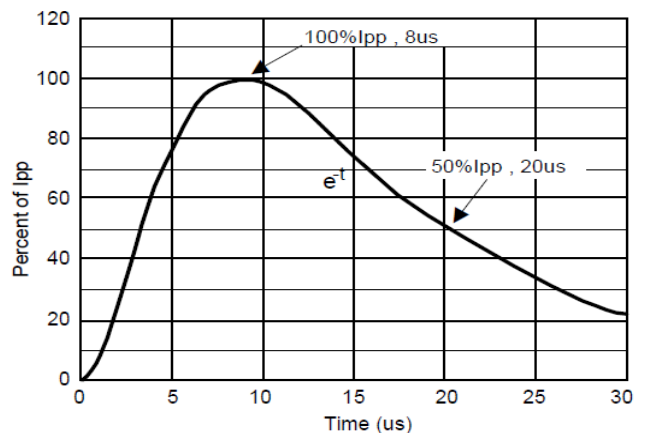
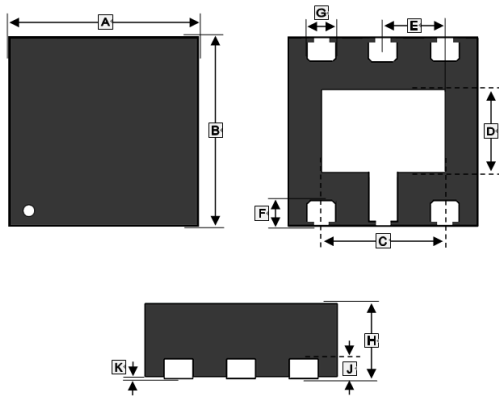


FIG. 4-8/20us Pulse Waveform



PACKAGE OUTLINE DIMENSIONS

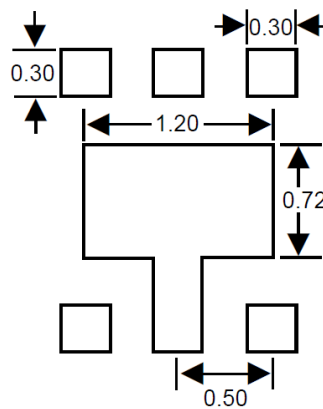
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REF.	Millimeter	
	Min.	Max.
A	1.55	1.65
B	1.55	1.65
C	0.85	1.10
D	0.45	0.70
E	0.50 BSC.	
F	0.20	0.30
G	0.20	0.30
H	0.50	0.60
J	0.152 REF.	
K	0	0.05

MOUNTING PAD LAYOUT

DFN1616-6L



*Dimensions in millimeters