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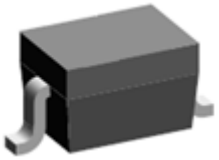
LC05C

ULTRA LOW CAPACITANCE TVS ARRAY

Features

- Small SOD-323 Package
- Bi-directional Configurations
- Peak Power Dissipation 100W @8 x 20 us Pulse
- Low Leakage
- Ultralow Capacitance 0.5pF
- Fast Response Time < 5 ns
- Protects One Power or I/O Port
- ESD Protection to IEC 61000-4-2 Level 4,15KV(Air), 8KV(Contanct)
- EFT Protection to IEC 61000-4-4 Level 4, 30A
- 16KV Human Body Model ESD Requirements
- RoHS Compliant in Lead-Free Versions



Applications

- Cell Phone Handsets and Accessories
- Microprocessor Based Equipment
- Personal Digital Assistant (PDA)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- USB Interface

Absolute Maximum Ratings

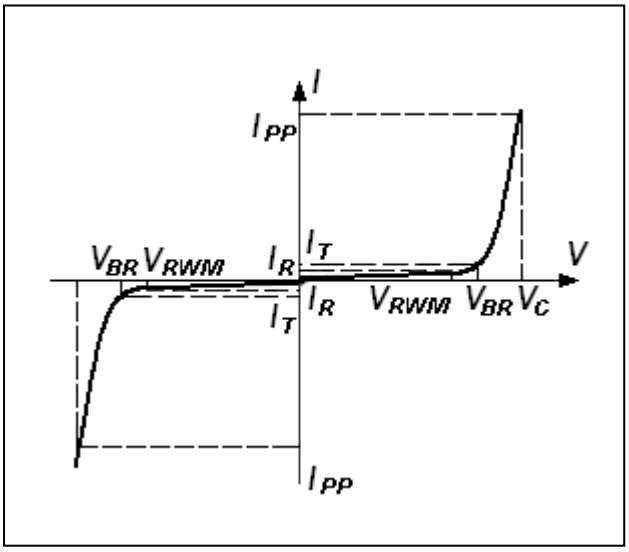
Parameter	*Symbol*	*Value*	*Units*
Peak Power Dissipation (Note 1.) @T_L = 25°C	P_{PK}	100	W
IEC 61000-4-2 (ESD) Air		±15	KV
CONTACT		±8.0	KV
IEC 61000-4-4 (EFT)		30	A
ESD Voltage Per Human Body Model	V_{PP}	16	KV
Storage Temperature Range	T_{STG}	-55 to 150	°C
Operating Junction Temperature Range	T_J	-55 to 150	°C

1. 8 X 20 us, non–repetitive

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T



Electrical Characteristics *Ratings at 25°C ambient temperature unless otherwise specified.*

Device	V_{RWM} (V)	I_R(uA) @ V_{RWM}	V_{BR} (V) @ I_T (Note 2)	I_T(mA)	Vc(V) @Ip=1A	Vc(V) @Ipp	C (pF)
	Max	Max	Min		Max	Max	TYP
LC05C	5.0	5.0	6.0	1.0	15	25@2A	0.5

*Surge current waveform per Figure 1.

2. V_{BR} is measured with a pulse test current IT at an ambient temperature of 25℃

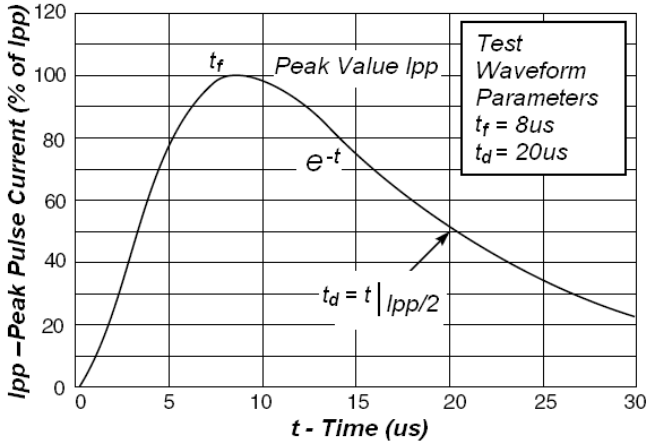


Fig1. Pulse Waveform

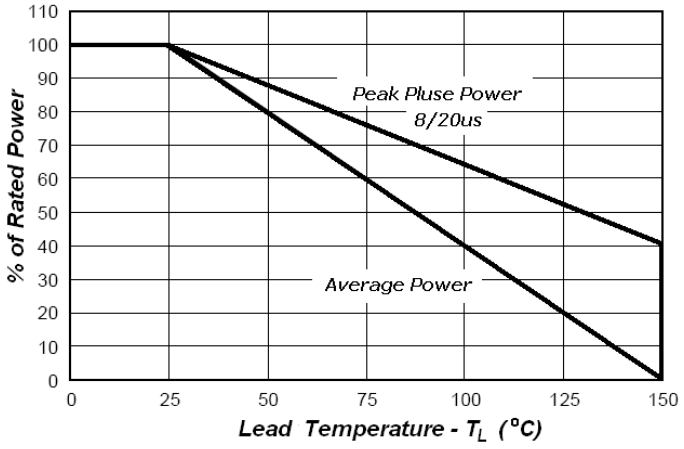


Fig2. Power Derating

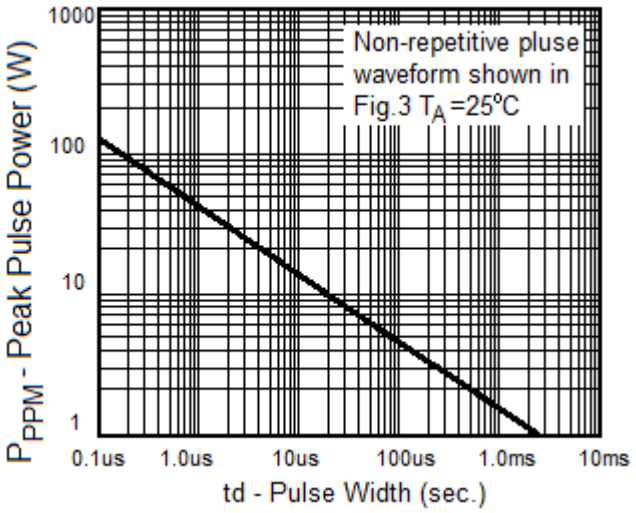
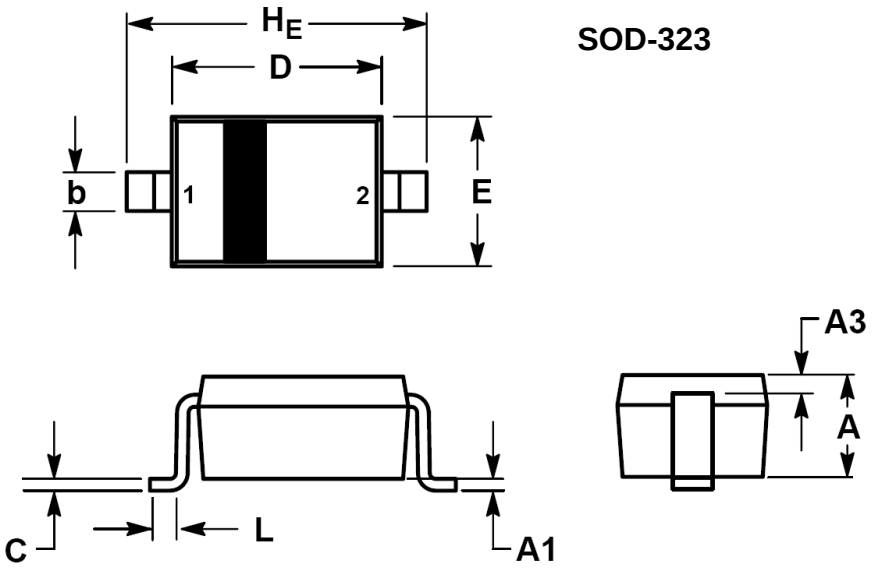


Fig3. Peak Pulse Power vs Pulse Time

Package Dimensions



Dim	*Millimeters*			*Inches*		
	MIN	*NOM*	*MAX*	*MIN*	*NOM*	*MAX*
A	*0.80*	*0.90*	*1.00*	*0.031*	*0.035*	*0.040*
A1	*0.00*	*0.05*	*0.10*	*0.000*	*0.002*	*0.004*
A3	*0.15 REF*			*0.006 REF*		
b	*0.25*	*0.32*	*0.4*	*0.010*	*0.012*	*0.016*
C	*0.080*	*0.12*	*0.177*	*0.003*	*0.005*	*0.007*
D	*1.60*	*1.70*	*1.80*	*0.063*	*0.066*	*0.071*
E	*1.15*	*1.25*	*1.40*	*0.045*	*0.049*	*0.055*
L	*0.08*			*0.003*		
H_E	*2.30*	*2.50*	*2.70*	*0.090*	*0.098*	*0.106*