



SMD ESD Protection Diode

LKC05N4C075-B



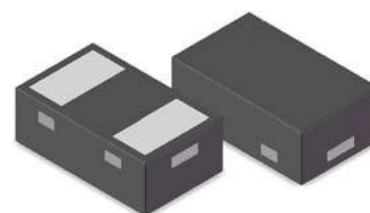
Halogen Free

Rev. 02 — 3 June 2022

Product Profile

1. Features

- 50Watts peak pulse power (tp =8/20μs)
- Reverse Working Voltage: 5V
- Low capacitance: Cj = 0.75pF typ
- IEC 61000-4-2 : ±15kV contact, ±15kV air
- IEC 61000-4-4 (EFT) : 40A (5/50ns)
- IEC 61000-4-5 (Lightning): 7A (8/20μs)



DFN1006-2L

2. Applications

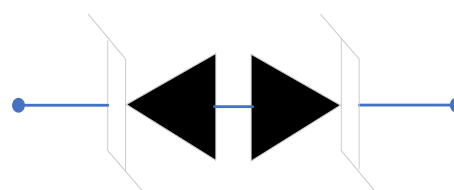
- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation

3. Mechanical Data

- DFN1006 package
- Molding compound flammability rating UL94V-0
- Packaging: Tape and Reel
- RoHS/WEEE Compliant

4. Pinning information

Pin	Description
1	Cathode 1
2	Cathode 2





5. Absolute Maximum Rating

Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	50	Watts
Peak Pulse Current ($t_p = 8/20\mu s$) (note1)	I_{pp}	7	A
Lead Soldering Temperature	T_L	260(10seconds)	$^{\circ}C$
Junction Temperature	T_J	-55 to + 125	$^{\circ}C$
Storage Temperature	T_{stg}	-55 to + 125	$^{\circ}C$

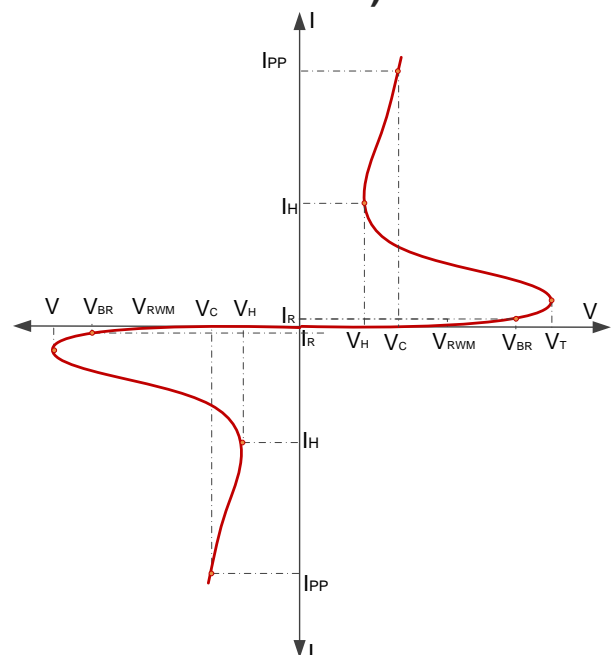
Note.: 8/20 μs pulse waveform.

6. Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Holding Voltage	V_H		2.0			V
Holding Current	I_H		15			mA
Reverse Leakage Current	I_R	$V_{RWM}=3.3V, T=25^{\circ}C$			500	nA
Clamping Voltage	V_C	$I_{PP}=7A, t_p=8/20\mu s$		6.2	7.5	V
Trigger Voltage	V_T		8		16	V
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		0.75		pF

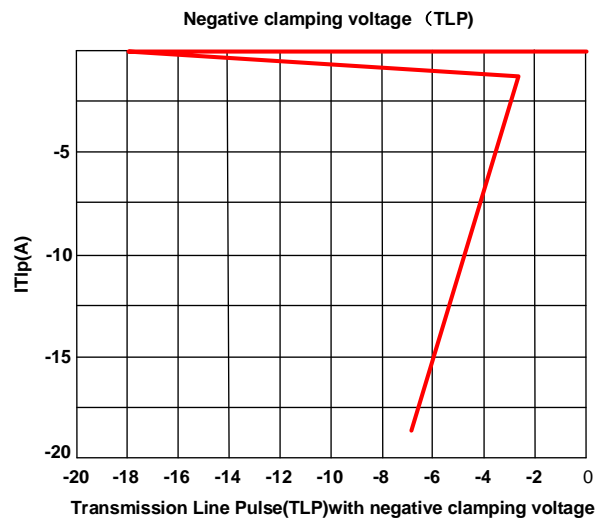
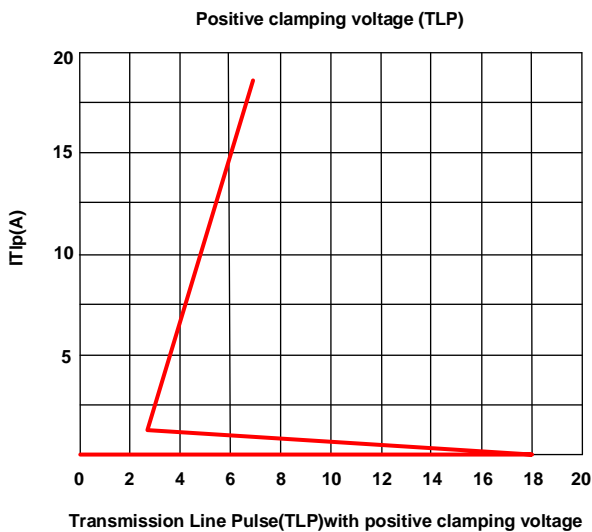
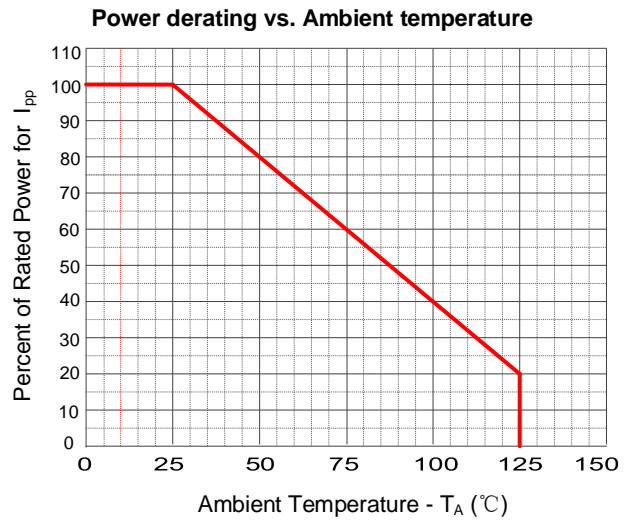
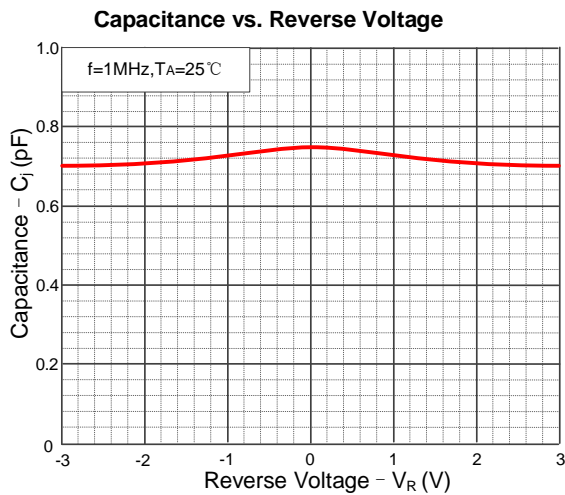
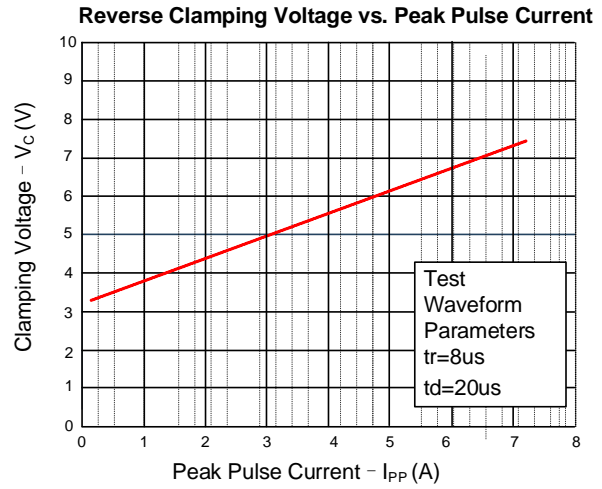
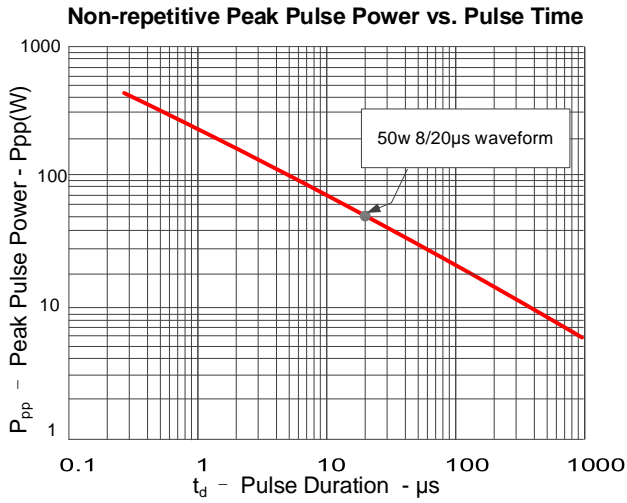
7. Electrical Parameters (TA = 25°C unless otherwise noted)

- V_{RWM} ... Reverse Working Voltage Max.
- I_R Maximum Reverse Leakage Current @ V_{RWM}
- V_T Trigger Voltage V_R
- V_H Holding Voltage
- I_H Holding Current
- V_{BR} Reverse Breakdown Voltage
- I_{PP} Maximum Reverse Peak Pulse Current
- V_C Clamping Voltage @ I_{PP}





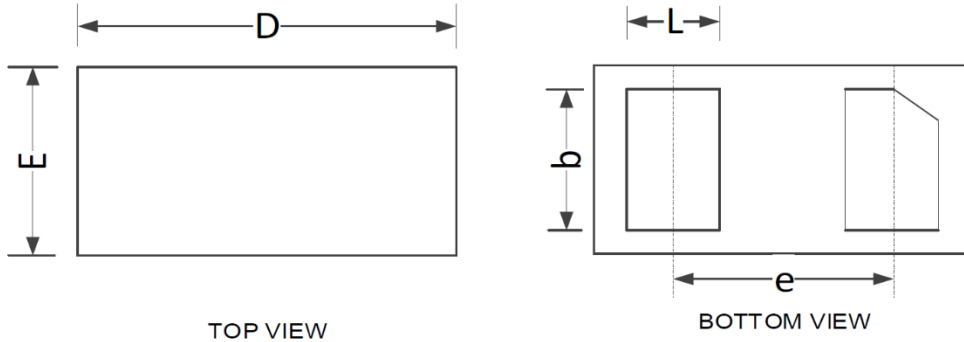
8. Typical Characteristics





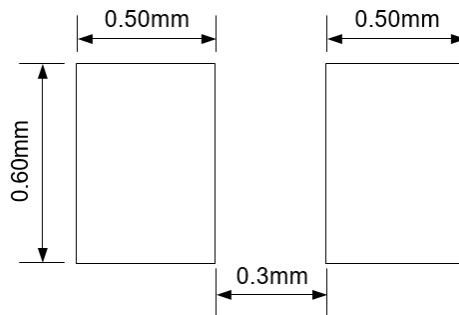
Outline Drawing – DFN1006

9. Package information



COMMON DIMENSION (MM)			
PKG	DFN1006		
REF.	MIN.	NOM.	MAX.
A	0.40		0.55
b	0.45	0.50	0.55
D	0.95	1.00	1.05
e	0.65BSC		
E	0.55	0.60	0.65
L	0.20	0.25	0.30

10. Recommend PCB Layout



11. Marking Code

Part Number	Marking Code
LKC05N4C075-B	TA



12. Ordering information

Order code	Package	Base qty	Delivery mode
LKC05N4C075-B	DFN1006	10k	Tape and reel



13. Contact Information

Online product information is available at www.lanker-semi.com

Buy our products or get free samples, for further information and requests,

e-mail us at: sales@lanker-semi.com

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15. Reversion History

Document ID	Release Date	Sheet Status	Change Notice	Supersedes
02	03-Jun-2022	Product data sheet	-	-