LKS05N4C1D5-B

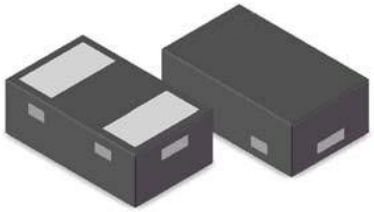
Rev. 02 — 3 June 2022

Halogen Free

Product Profile

1. Features

- 230Watts peak pulse power (tp = 8/20μs)
- Reverse Working Voltage: 5V
- capacitance: Cj = 1.5pF typ
- IEC 61000-4-2 ： ±30kV contact, ±30kV air
- IEC 61000-4-4 (EFT) ： 40A (5/50ns)
- IEC 61000-4-5 (Lightning)： 14A (8/20μs)



DFN1006-2L

2. Applications

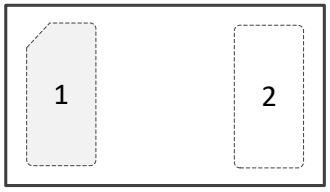
- Microprocessor based equipment
- Personal Digital Assistants
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Pagers Peripherals

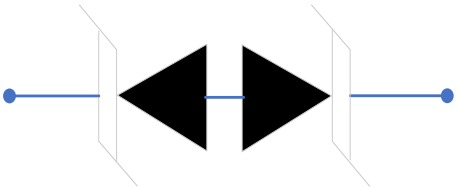
3. Mechanical Data

- DFN1006 package
- Molding compound flammability rating: UL 94V-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 =8/20μs)	P_{PP}	230	Watts
Peak Pulse Current (t_p =8/20μs) (note1)	I_{pp}	14	A
Lead Soldering Temperature	T_L	260(10seconds)	℃
Junction Temperature	T_J	-55 to + 125	℃
Storage Temperature	T_{stg}	-55 to + 125	℃

Note:. 8/20μs pulse waveform.

6. Electrical Characteristics

Parameter	Symbol	Conditions	Min	Typical	Max	Units
Reverse Stand-Off Voltage	V_{RWM}				5.0	V
Reverse Breakdown Voltage	V_{BR}	I_T=1mA	6.5			V
Reverse Leakage Current	I_R	V_{RWM}=5.0V,T=25℃			1	uA
Clamping Voltage	V_C	I_{PP}=14A, tp=8/20μs		17		V
Junction Capacitance	C_j	V_R = 0V, f = 1MHz		1.5	1.9	pF

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

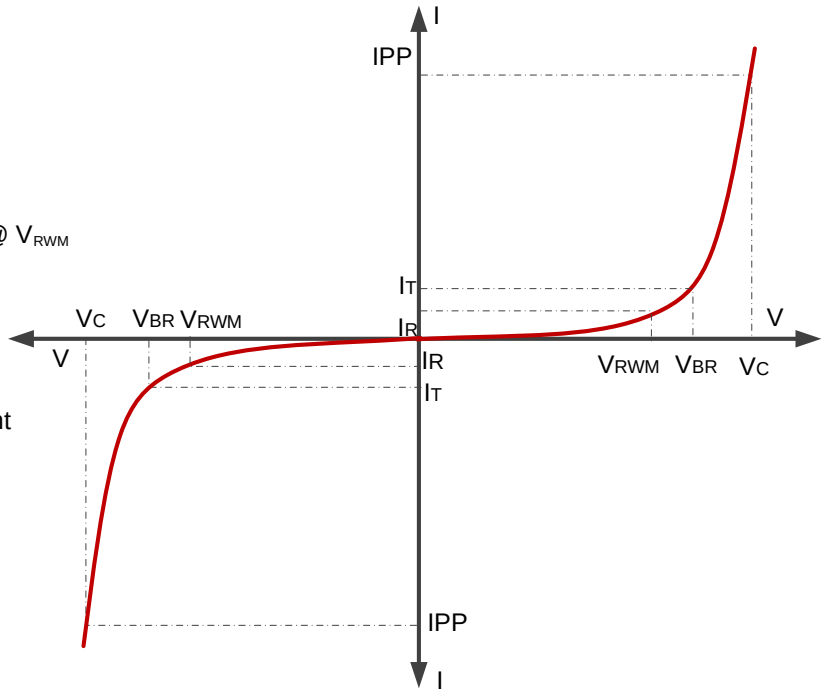
V_{RWM} ……Reverse Working Voltage Max

I_R …… Maximum Reverse Leakage Current @ V_{RWM}

V_{BR} …… Reverse Breakdown Voltage

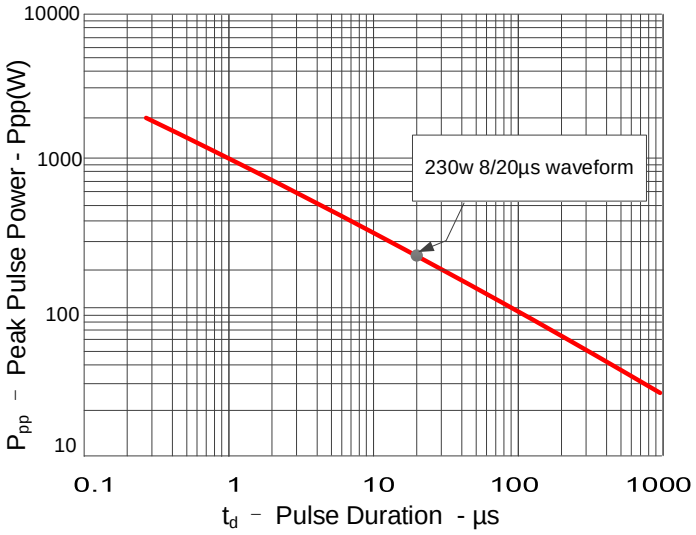
V_C …… Clamping Voltage @ I_{PP}

I_{PP} …… Maximum Reverse Peak Pulse Current

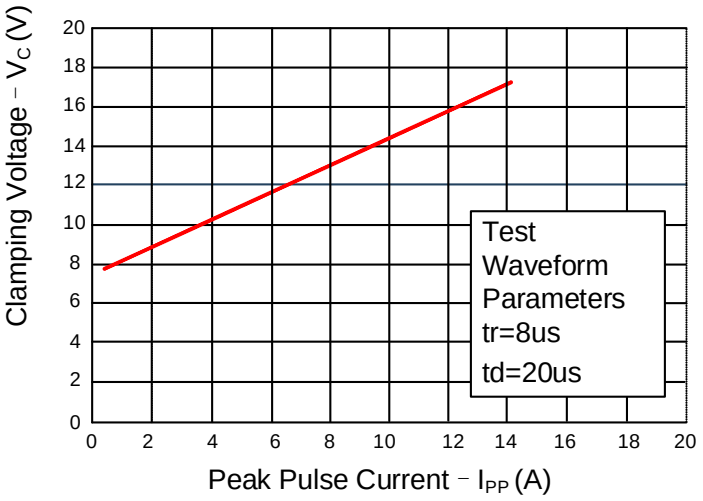


8. Typical Characteristics

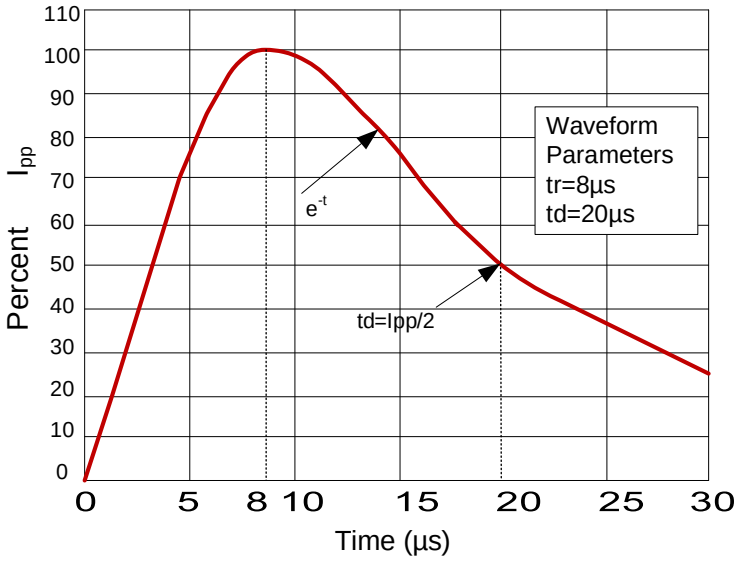
Non-repetitive Peak Pulse Power vs. Pulse Time



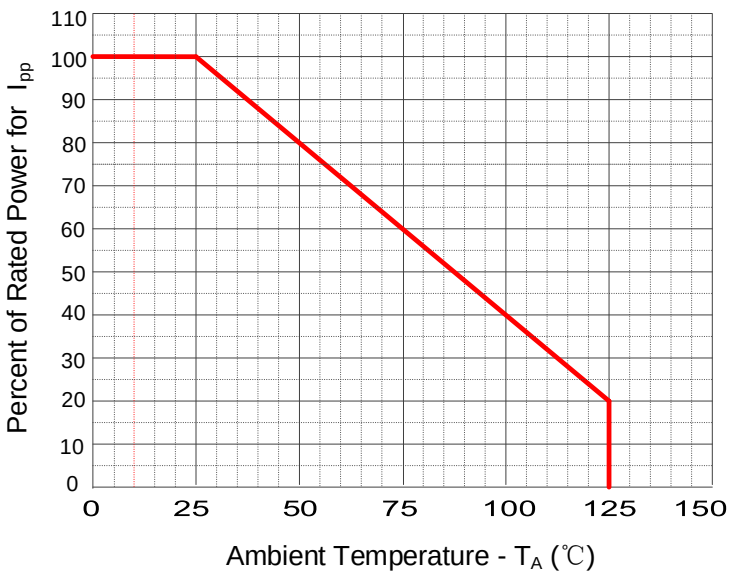
Reverse Clamping Voltage vs. Peak Pulse Current



8/20μs Pulse Waveform

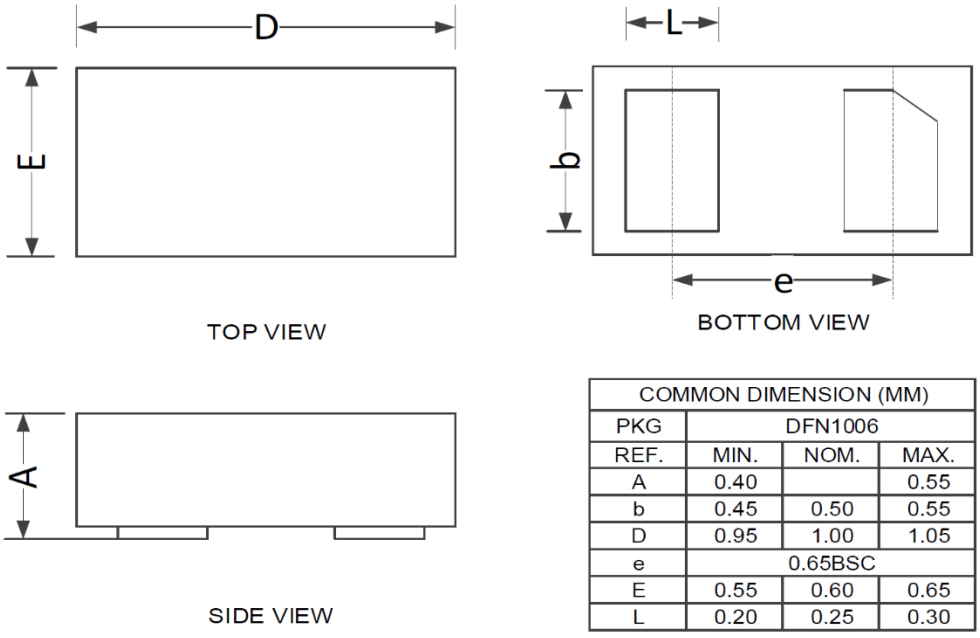


Power derating vs. Ambient temperature



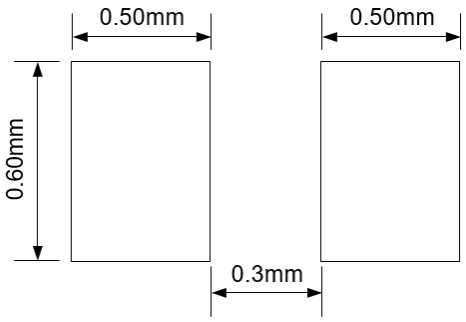
Outline Drawing – DFN1006

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
LKS05N4C1D5-B	L5:

12. Ordering information

Order code	Package	Base qty	Delivery mode
LKS05N4C1D5-B	DFN1006	10k	Tape and reel

13. Contact Information

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

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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	-	-