

ASB05LCDF

FEATURES:

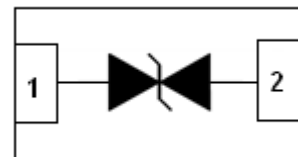
- ✧ Protects one bi-directional I/O line
- ✧ Low clamping voltage
- ✧ Low operating voltage: 5.0V
- ✧ Low leakage current
- ✧ Ultra Low Capacitance: 0.5 pF
- ✧ ROHS compliant



0402(DFN-2L)

MAIN APPLICATIONS

- ✧ USB Ports
- ✧ Display Port
- ✧ Wireless Communications
- ✧ Digital Visual Interface (DVI)
- ✧ Cellular Handsets & Accessories



PIN Configuration

PROTECTION SOLUTION TO MEET

- ✧ IEC61000-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- ✧ IEC61000-4-4 (EFT) 40A (5/50ns)

MECHANICAL CHARACTERISTICS

- ✧ Package 0402(DFN-2L)
- ✧ Molding Compound Flammability Rating : UL 94V-O
- ✧ Quantity Per Reel : 10,000pcs
- ✧ Lead Finish :Halogen Free
- ✧ Marking Code: 5BL or N

ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, RH=45%-75%, unless otherwise noted)

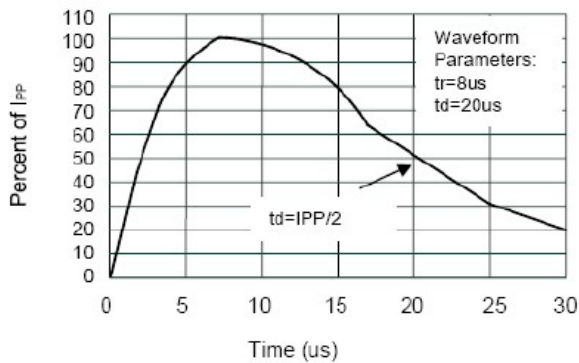
Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	± 20 ± 20	kV
P_{PP}	Peak Pulse Power (8/20 μs)	88	W
T_{OPT}	Operating Temperature	-55~125	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55~150	$^\circ\text{C}$

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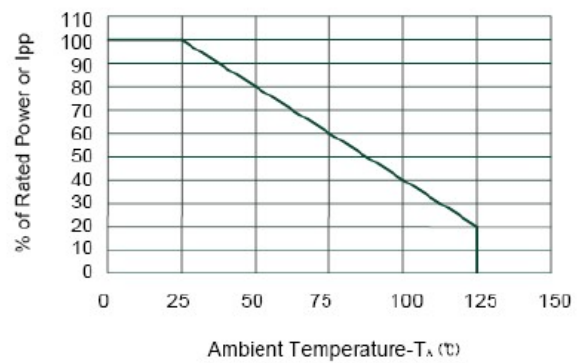
ELECTRICAL CHARACTERISTICS (T_A=25°C)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V _{RWM}	Reverse Working Voltage				5.0	V
V _{BR}	Reverse Breakdown Voltage	I _T = 1mA	6.0			V
I _R	Reverse Leakage Current	V _{RWM} = 5V			100	nA
V _C	Clamping Voltage	I _{PP} = 1A, t _p = 8/20μs			13	V
		I _{PP} = 4A, t _p = 8/20μs			22	V
C _J	Junction Capacitance	V _R = 0V, f = 1MHz		0.5		pF

RATINGS AND V-I CHARACTERISTICS CURVES (T_A=25°C, unless otherwise noted)



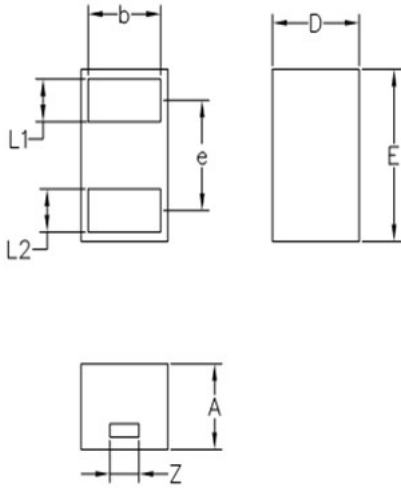
Pulse Waveform



Power Derating Curve

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PACKAGE MECHANICAL DATA



NOTE: ALL DIMENSIONS IN MM

	MIN	NOM	MAX
D	0.55	0.60	0.65
E	0.95	1.00	1.05
L1	0.20	0.25	0.30
L2	0.20	0.25	0.30
A	0.45	0.50	0.55
Z	0.15	0.20	0.25
b	0.45	0.50	0.55
e		0.64BSC	