

FEATURES:

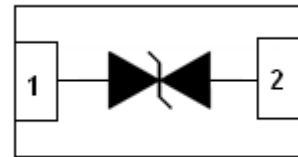
- ✧ Protects one bi-directional I/O line
- ✧ Low clamping voltage
- ✧ Low operating voltage: 5.0V
- ✧ Low leakage current
- ✧ Ultra Low Capacitance: 0.5 pF
- ✧ ROHS compliant
- ✧ Compliant to Halogen-free



DFN-2L(0402)

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), $\pm 15\text{kV}$ (contact)
- ✧ IEC61000-4-5 (Lightning) 4A (8/20 μs)

MECHANICAL CHARACTERISTICS

- ✧ Package DFN-2L(0402)
- ✧ Molding Compound Flammability Rating : UL 94V-O
- ✧ Lead Finish :Halogen Free
- ✧ Marking Code: 5BL or N ∞

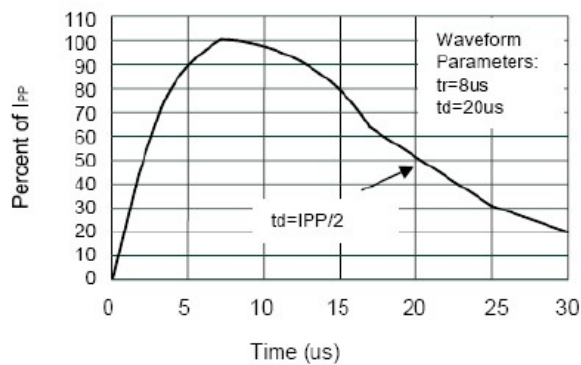
ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$, RH=45%-75%, unless otherwise noted)

Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air)	± 15	kV
	ESD per IEC 61000-4-2 (Contact)	± 15	
P_{PP}	Peak Pulse Power (8/20 μs)	80	W
T_{OPT}	Operating Temperature	-55~125	$^\circ\text{C}$
T_{STG}	Storage Temperature	-55~150	$^\circ\text{C}$

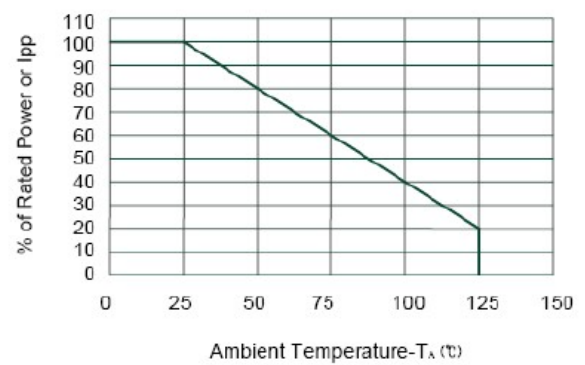
ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V_{RWM}	Reverse Working Voltage				5.0	V
V_{BR}	Reverse Breakdown Voltage	$I_T = 1\text{mA}$	6.0			V
I_{R}	Reverse Leakage Current	$V_{\text{RWM}} = 5\text{V}$			1	μA
V_{C}	Clamping Voltage	$I_{\text{PP}} = 1\text{A}, t_p = 8/20\mu\text{s}$			13	V
		$I_{\text{PP}} = 4\text{A}, t_p = 8/20\mu\text{s}$			22	V
C_{J}	Junction Capacitance	$V_{\text{R}} = 0\text{V}, f = 1\text{MHz}$		0.5		pF

RATINGS AND V-I CHARACTERISTICS CURVES ($T_A=25^{\circ}\text{C}$, unless otherwise noted)

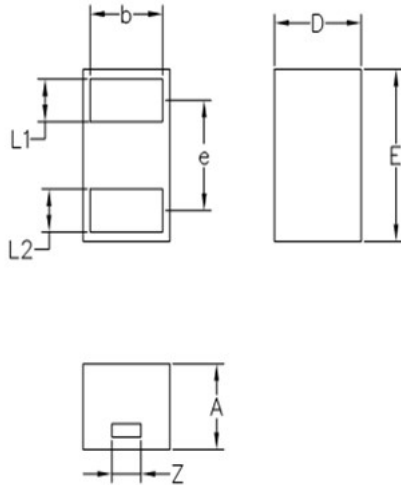


Pulse Waveform



Power Derating Curve

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	