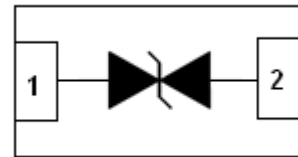


FEATURES:

- ✧ Protects one bi-directional I/O line
- ✧ Low clamping voltage
- ✧ Low operating voltage: 3.3V
- ✧ Low leakage current
- ✧ Ultra Low Capacitance: 0.4pF
- ✧ ROHS compliant
- ✧ Compliant to Halogen-free
- ✧ Suffix "-Q1" for AEC-Q101



DFN-2L(0402)



PIN Configuration

MAIN APPLICATIONS

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

PROTECTION SOLUTION TO MEET

- ✧ IEC61000-4-2 (ESD) $\pm 20\text{kV}$ (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
- ✧ Quantity Per Reel : 10,000pcs
- ✧ Lead Finish :Halogen Free
- ✧ Marking Code: S or BK

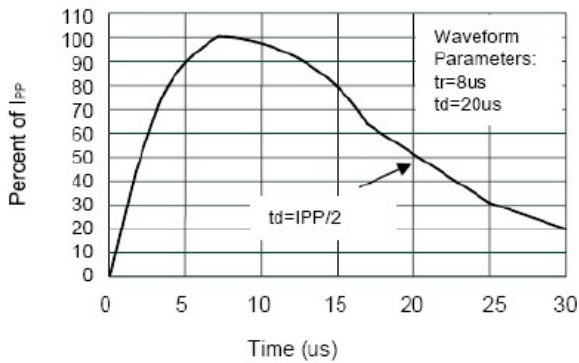
ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Units
V_{ESD}	ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	± 20 ± 15	kV
P_{PP}	Peak Pulse Power (8/20 μs)	100	W
T_{OPT}	Operating Temperature	-55~125	$^{\circ}\text{C}$
T_{STG}	Storage Temperature	-55~150	$^{\circ}\text{C}$

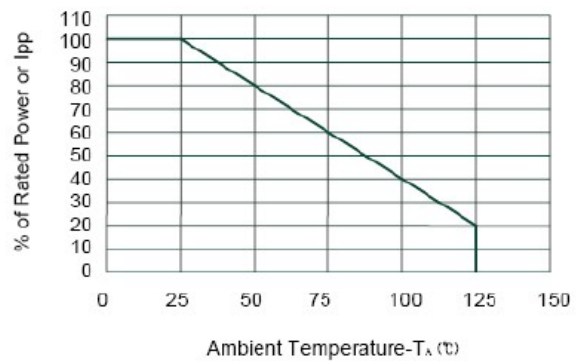
ELECTRICAL CHARACTERISTICS (T_A=25°C)

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
V _{RWM}	Reverse Working Voltage				3.3	V
V _{BR}	Reverse Breakdown Voltage	I _T = 1mA	5			V
I _R	Reverse Leakage Current	V _{RWM} = 3.3V			0.2	μA
V _C	Clamping Voltage	I _{PP} = 1A, t _p = 8/20μs			11	V
		I _{PP} = 4A, t _p = 8/20μs			25	V
C _J	Junction Capacitance	V _R = 0V, f = 1MHz		0.3	0.4	pF

ELECTRICAL CHARACTERISTICS CURVES (T_A=25°C, unless otherwise noted)

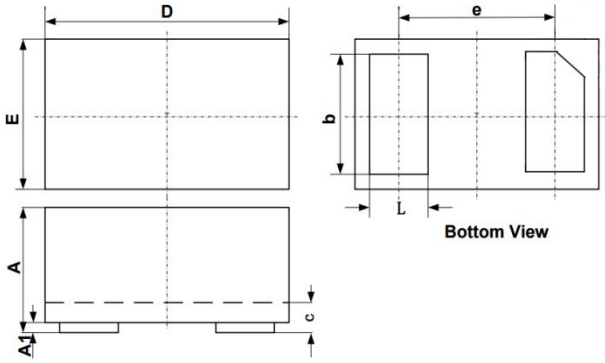


Pulse Waveform



Power Derating Curve

PACKAGE MECHANICAL DATA



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.35	0.50	0.55	0.014	0.020	0.022
A1	0.00	0.02	0.05	0.000	0.001	0.002
b	0.42	0.50	0.55	0.017	0.020	0.022
c	0.12	0.15	0.18	0.005	0.006	0.007
D	0.95	1.00	1.05	0.037	0.039	0.041
e	0.65 BSC			0.026 BSC		
E	0.55	0.60	0.65	0.022	0.024	0.026
L	0.20	0.25	0.37	0.008	0.015	0.012