Data Sheet

Customer：

Product :	Zener Chips For LED ESD Protection
Part No.:	ZNLC03 Series
Issued Date:	11-Jan-11
Edition :	REV.A

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11-Jan-11	11-Jan-11	11-Jan-11	11-Jan-11	
Kris	***Ann***	***J.C Liu***		

350W
Voltage : 3.3 to 24Volts

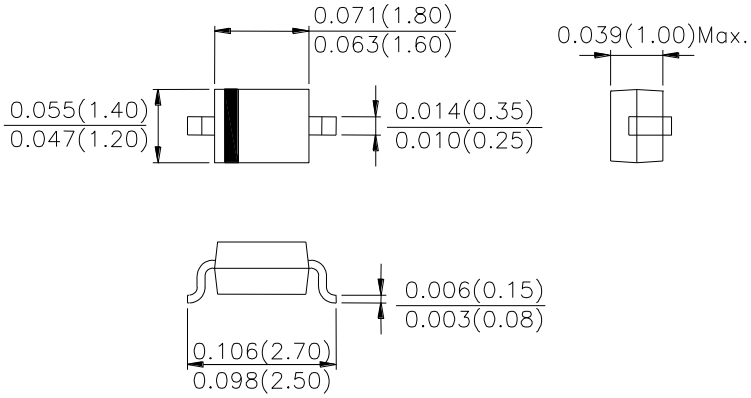
■Features

- 61000-4-2(ESD): Air-15KV, Contact-8KV
- Uni-directional & Bi-directional configuration
- Stand-off voltage: 3.3V~24V
- Low leakage
- Low capacitance, 3pF maximum
- Replacement for MLV(0805)
- Protect one poer or I/O port
- Low clamping voltage
- In compliance with EU RoHS 2002/95/EC directives
- Halogen free

■Mechanical Data

Epoxy : UL94-V0 rated flame retardant
Case : Molded Plastic, SOD-323
Terminals : Solder plated, Solderable per MIL-STD-750, Method 2026
Polarity : Indicated by cathode band
Weight : 0.0002 ounce, 0.005 gram

■Package Dimensions in inches and (millimeters): SOD-323



■Maximum Ratings And Electrical Characteristics

at T_A=25℃ unless otherwise noted, V_F=0.9V max. @I_F=10mA for all types

Parameter	Conditions	Symbol	Value	Unit
Peak Power Dissipation	tp=8/20us	P_{PP}	350	W
Storage Temperature		T_{STG}	-65~+175	℃
Operating temperature		T_J	-55~+150	℃

Part No.	V_{RWM} (V) Max.	V_{BR}(V)@I_T (Note 2) Min.	I_T (mA)	Max. Clamp Voltage @I_{PP}=1.0 (Note 2) (A)	Maximum Campling @I_{PP}	I_R(μA) Leak Current@V_{RWM} Max.	C(pF) (Note 3) Max.	Marking Code
ZNLC03	3.3	4.0	1.0	7.0	19.0V@20A	5	3	C
ZNLC03C	3.3	4.0	1.0	7.0	19.0V@20A	5	3	CC
ZNLC05	5.0	6.0	1.0	9.8	18.3V@17A	5	3	A
ZNLC05C	5.0	6.0	1.0	9.8	18.3V@17A	5	3	AC
ZNLC08	8.0	8.5	1.0	13.4	18.5V@17A	2	3	B
ZNLC08C	8.0	8.5	1.0	13.4	18.5V@17A	2	3	BC
ZNLC12	12	13.3	1.0	19.0	28.6V@11A	1	3	D
ZNLC12C	12	13.3	1.0	19.0	28.6V@11A	1	3	DC
ZNLC15	15	16.7	1.0	24.0	31.8V@10A	1	3	E
ZNLC15C	15	16.7	1.0	24.0	31.8V@10A	1	3	EC
ZNLC18	18	18.0	1.0	29.0	45.0V@8A	1	3	G
ZNLC18C	18	18.0	1.0	29.0	45.0V@8A	1	3	GC
ZNLC24	24	26.7	1.0	43.0	56.0V@6A	1	3	H
ZNLC24C	24	26.7	1.0	43.0	56.0V@6A	1	3	HC

1. Part numbers with an additional ”C” suffix are bi-directional devices, i.e.,ZNLC03C.
2. Uni-directional only: positife potential is applied from pin 2 to 1, see figure 1
3. Off-state capacitance 1MHz, zero dc bias.

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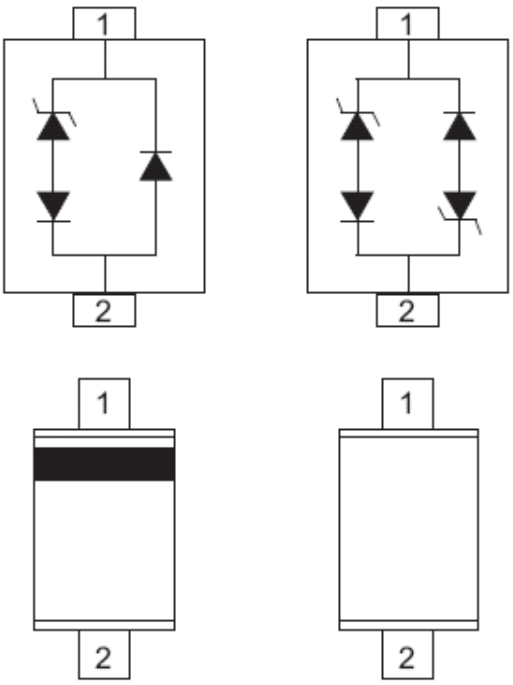
■Rated and Characteristic Curve

FIG.1 UNI-DIRECTIONAL & BI-DIRECTIONAL



Uni-Directional Bi-Directional

FIG. 2 PULSE WAVE FORM

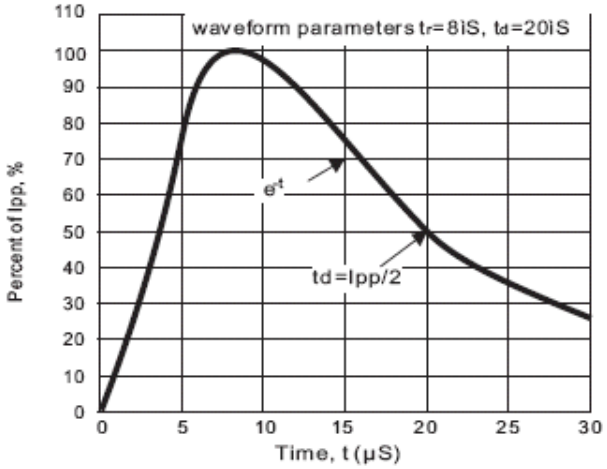
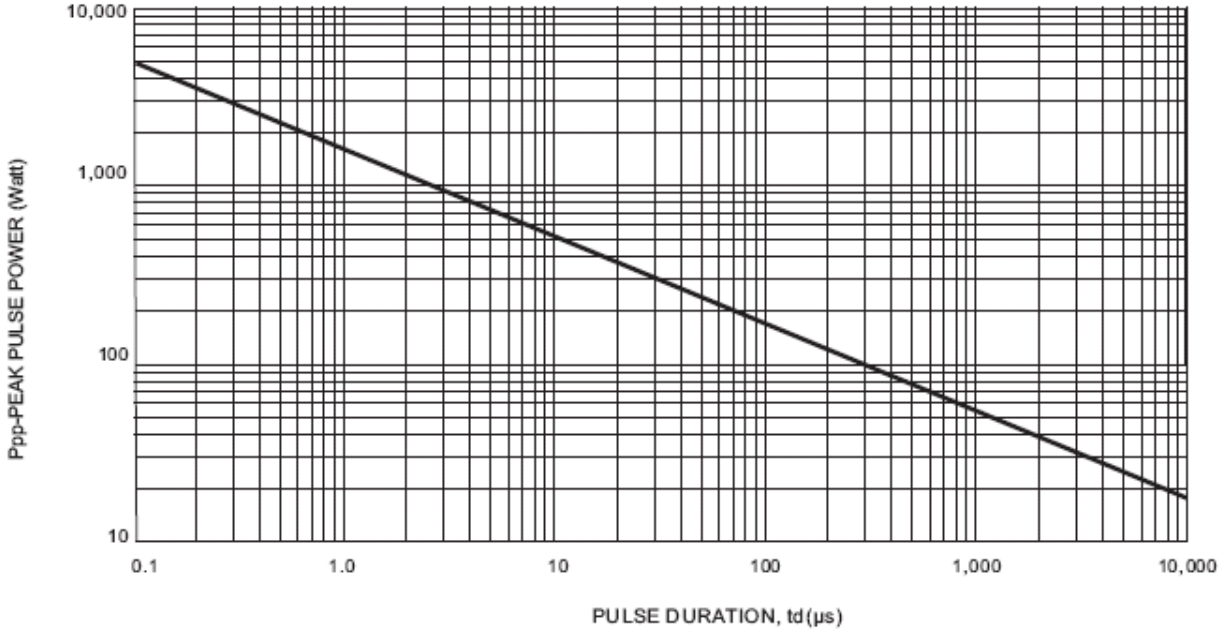


FIG.3 PEAK PULSE POWER VS PULSE TIME



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