

ESDA3L03 SERIES

350W Surface Mount Transient Voltage Suppressor Array
VOLTAGE : 3.3 TO 24Volts

Features	Outline
• 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, • Suffix "G" indicates Halogen-free part, ex.ESDA3L03G. • In compliance with EU RoHS 2002/95/EC directives.	SOD-323FL Dimensions in inches and (millimeters)
Mechanical data	
• Epoxy:UL94-V0 rated flame retardant • Case : Molded plastic, SOD-323FL • Terminals : Solder plated, solderable per MIL-STD-750, Method 2026 • Polarity : Indicated by cathode band • Weight : Approximated 0.004 gram	

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(at $T_A=25^{\circ}\text{C}$ unless otherwise noted, $V_F = 0.9\text{V}$ Max. @ $I_F = 10\text{mA}$ for all types)

PARAMETER	CONDITIONS	Symbol	Value	UNIT
Peak power dissipation	$t_p = 8/20 \text{ us}$	P_{PP}	350	W
Storage temperature		T_{STG}	-65~+175	$^{\circ}\text{C}$
Operating temperature		T_J	-55~+150	$^{\circ}\text{C}$

Part No.	V_{RWM} (V) Max	$V_{BR}(V)@I_T$ (Note 2) Min	$V_{BR}(V)@I_T$ (Note 2) Max	I_T (mA)	Max. Clamp Voltage @ $I_{PP}=1.0$ (Note 2)(A)	Maximum Clamping @ I_{PP}	$I_R(\mu\text{A})$ Leak Current@ V_{RWM} Max	C(pF) (Note 3) Max	Marking Code
ESDA3L03	3.3	4.75	5.25	1.0	7.0	19.0V@20.0A	20	3	AA, 03
ESDA3L03C	3.3	4.75	5.25	1.0	7.0	19.0V@20.0A	20	3	AQ, 03C
ESDA3L05	5.0	7.03	7.77	1.0	9.8	18.3V@17.0A	1	3	AB, 05
ESDA3L05C	5.0	7.03	7.77	1.0	9.8	18.3V@17.0A	1	3	AL, 05C
ESDA3L08	8.0	8.93	9.87	1.0	13.4	18.5V@17.0A	1	3	AC, 08
ESDA3L08C	8.0	8.93	9.87	1.0	13.4	18.5V@17.0A	1	3	AR, 08C
ESDA3L12	12	13.97	15.44	1.0	19	28.6V@11.0A	1	3	AJ, 02
ESDA3L12C	12	13.97	15.44	1.0	19	28.6V@11.0A	1	3	AM, 02C
ESDA3L15	15	17.39	19.22	1.0	24	31.8V@10.0A	1	3	AS, 06
ESDA3L15C	15	17.39	19.22	1.0	24	31.8V@10.0A	1	3	AN, 06C
ESDA3L18	18	18.0	20.0	1.0	29	45.0V@8.0A	1	3	01
ESDA3L18C	18	18.0	20.0	1.0	29	45.0V@8.0A	1	3	01C
ESDA3L24	24	27.27	30.14	1.0	43	56.0V@6.0A	1	3	AT, 04
ESDA3L24C	24	27.27	30.14	1.0	43	56.0V@6.0A	1	3	AP, 04C

1. Part numbers with an additional "C" suffix are bi-directional devices, i.e., ESDA3L03C.
2. Uni-directional only: positive potential is applied from pin 2 to 1, see figure 1
3. Off-state capacitance 1MHz, zero dc bias.



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Rating and characteristic curves

FIG.1 UNI-DIRECTIONAL & BI-DIRECTIONAL

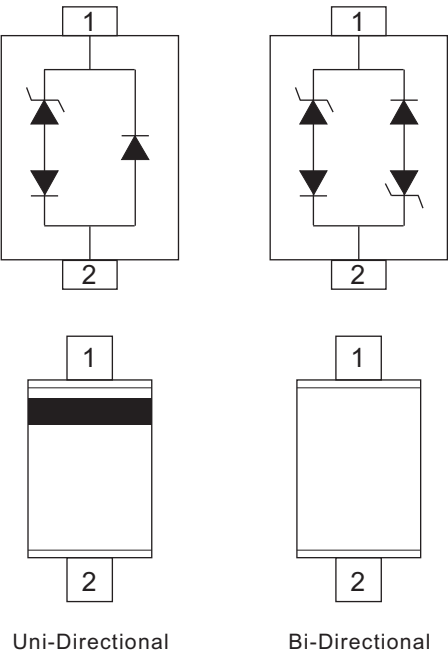


FIG. 2 PULSE WAVE FORM

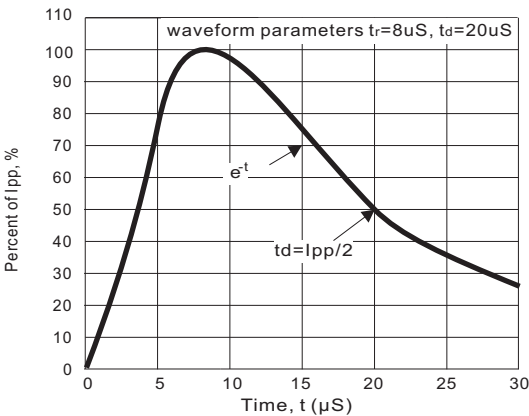


FIG.3 PEAK PULSE POWER VS PULSE TIME

