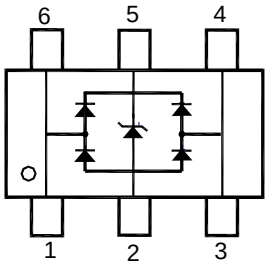
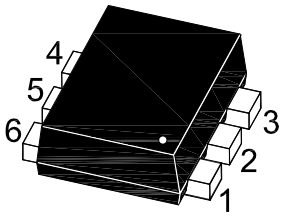
ESDL0502DE

Low Capacitance TVS Array

Features

- Protects up to two I/O lines & power line
- Low leakage current and clamping voltage
- Low operating voltage





1. I/O1 2. GND 3. I/O2
4. I/O3 5. V_{CC} 6. I/O4
Marking Code: **A**
SOT-563 Plastic package

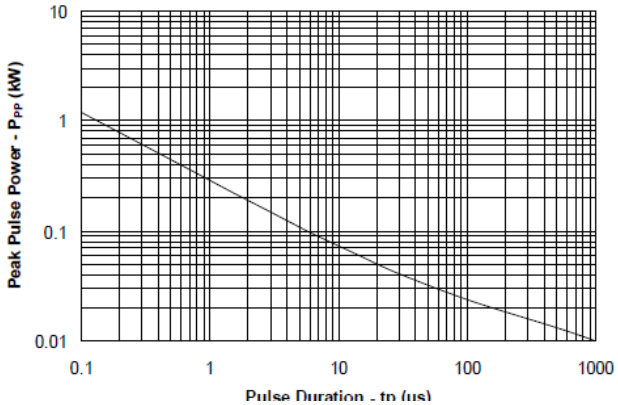
Absolute Maximum Ratings (T_a = 25 ℃)

Parameter		Symbol	Value	Unit
Peak Pulse Power (tp = 8/20 μs)		P_{PK}	50	W
Peak Pulse Current (tp = 8/20 μs)		I_{PP}	3	A
ESD Discharge (IEC61000-4-2)	Air Contact	V_{ESD}	± 20 ± 15	KV
Junction Temperature		T_j	- 55 to + 125	°C
Storage Temperature Range		T_{stg}	- 55 to + 150	°C

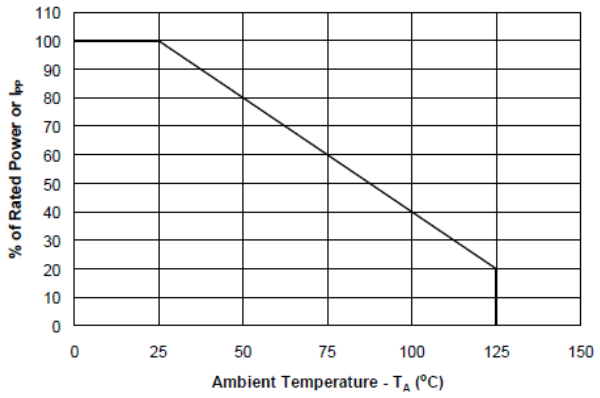
Characteristics at T_a = 25 ℃

Parameter	Symbol	Min.	Max.	Unit
Reverse Working Voltage Between I/O lines to Gnd or I/O to I/O	V_{RWM}	-	5	V
Reverse Breakdown Voltage at I_R = 1 mA, Between I/O lines to Gnd	$V_{(BR)R}$	6	-	V
Reverse Current at V_{RWM} = 5 V, Between I/O lines to Gnd or I/O to I/O	I_R	-	1	μA
Clamping Voltage at I_{PP} = 1 A, t_p = 8/20 μs, Between I/O lines to Gnd at I_{PP} = 3 A, t_p = 8/20 μs, Between I/O to Gnd at I_{PP} = 3 A, t_p = 8/20 μs, Between I/O to I/O	V_C	- - -	14 16 18	V
Junction Capacitance at V_R = 0 V, f = 1 MHz, Between I/O to Gnd at V_R = 0 V, f = 1 MHz, Between I/O to I/O	C_j	- -	0.9 0.7	pF

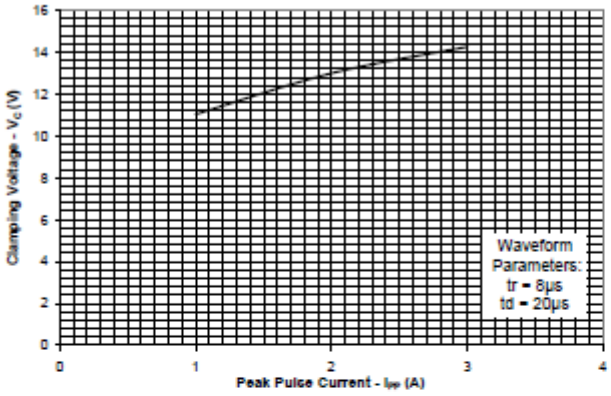
Non-Repetitive Peak Pulse Power vs. Pulse Time



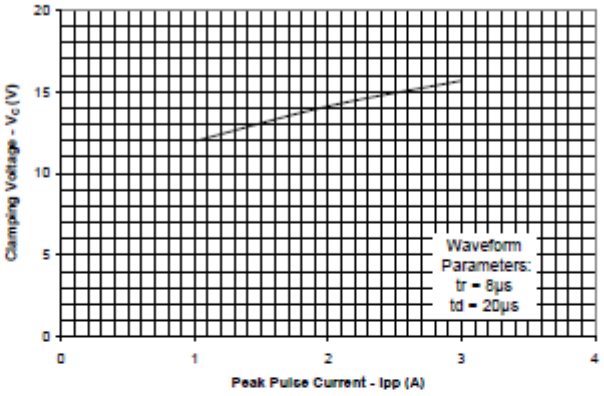
Power Derating Curve



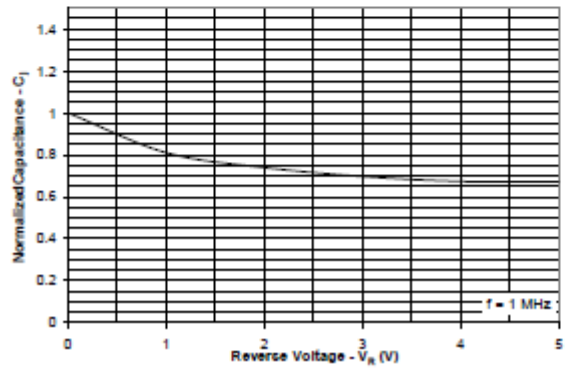
Clamping Voltage vs. Peak Pulse Current
I/O to Gnd - Pin 1, 3, 4, 6 to Pin 2



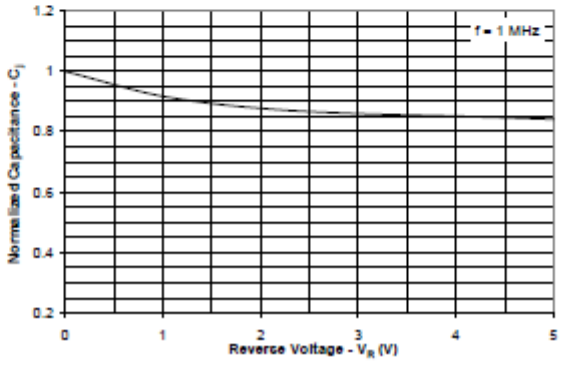
Clamping Voltage vs. Peak Pulse Current
I/O to I/O



Normalized Capacitance vs. Reverse Voltage
I/O to Gnd - Pin 1, 3, 4, or 6 to Pin 2



Normalized Capacitance vs. Reverse Voltage
I/O to I/O



SOT-563 Package Outline Dimensions (Units: mm)