

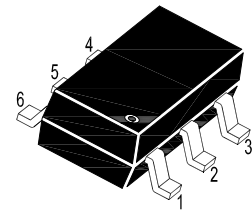
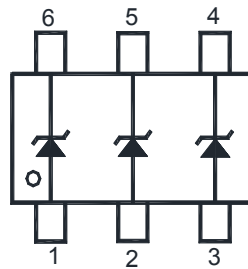
ESDU0501DW

Transient Voltage Suppressors

for ESD Protection

Features

- Excellent clamping capability
- Low leakage
- Fast response time



Marking Code:ED
SOT-363 Plastic package

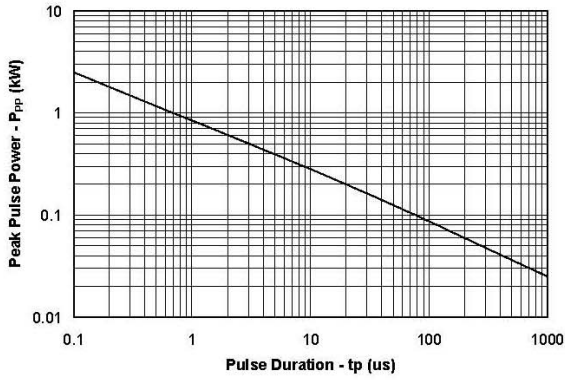
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Reverse Stand-Off Voltage	V_R	5	V
Peak Pulse Current ($t_p = 8/20\ \mu\text{s}$)	I_{PP}	16	A
IEC61000-4-2 (ESD) Air Contact	V_{PP}	± 20 ± 15	KV
Peak Pulse Power ($t_p = 8/20\ \mu\text{s}$)	P_{PK}	200	W
Operation Temperature Range	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

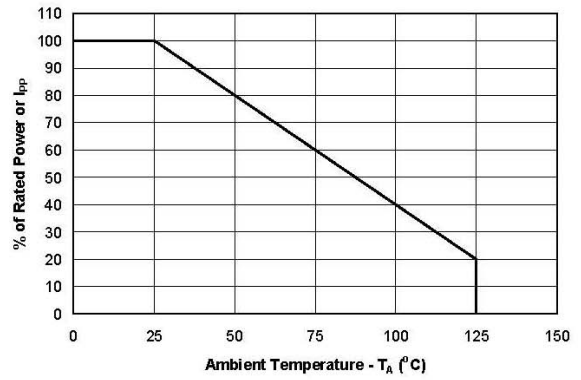
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 1\ \text{mA}$	$V_{(BR)R}$	6	-	V
Forward Voltage at $I_F = 10\ \text{mA}$	V_F	-	0.9	V
Reverse Current at $V_R = 5\ \text{V}$	I_R	-	1	μA
Clamping Voltage at $I_{PP} = 5\ \text{A}$, $t_p = 8/20\ \mu\text{s}$ at $I_{PP} = 16\ \text{A}$, $t_p = 8/20\ \mu\text{s}$	V_C	- -	9.8 12.5	V
Junction Capacitance at $V_R = 0\ \text{V}$, $f = 1\ \text{MHz}$	C_j	-	160	pF

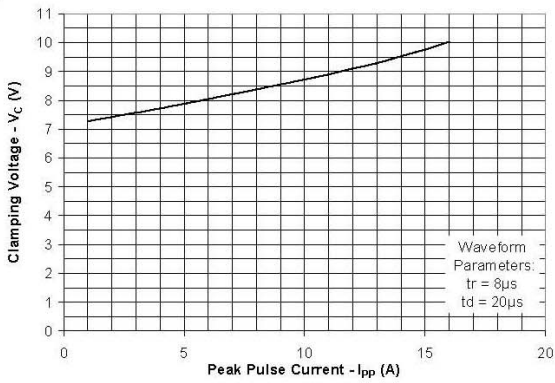
Non-Repetitive Peak Pulse Power vs. Pulse Time



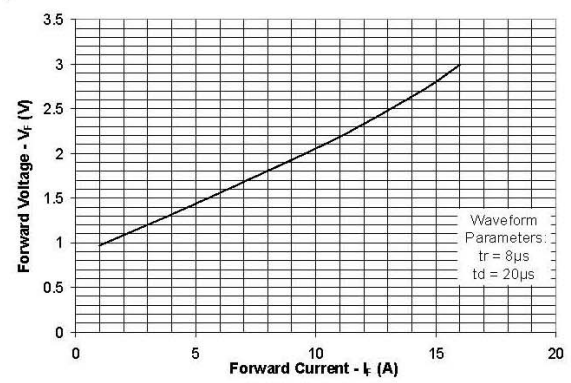
Power Derating Curve



Clamping Voltage vs. Peak Pulse Current

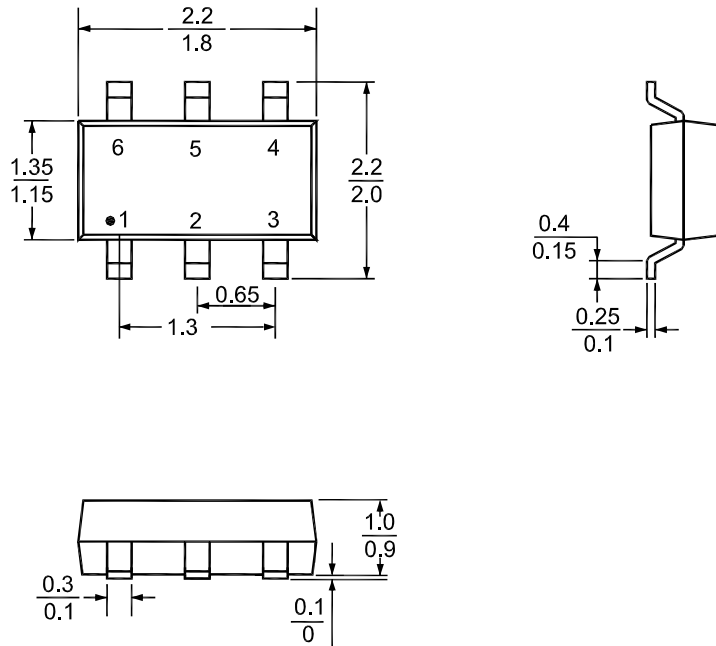


Forward Voltage vs. Forward Current

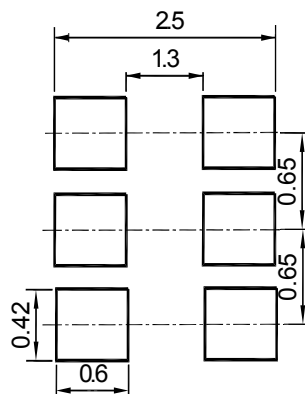


Package Outline Dimensions (Units: mm)

SOT-363



Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-363	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000