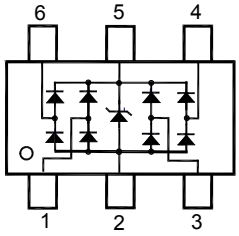
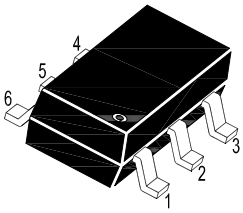
ESDULC64DW

ESD Protection Diode





1. I/O1 2. GND 3. I/O2
4. I/O3 5. V_{CC} 6. I/O4
SOT-363 Plastic Package

Absolute Maximum Ratings (T_a = 25℃)

Parameter		Symbol	Value	Unit
Peak Pulse Power (tp = 8/20 μs)		P_{PK}	100	W
Peak Pulse Current (tp = 8/20 μs)		I_{PP}	6	A
IEC61000-4-2 (ESD)	Air Contact	V_{ESD}	±15 ±15	KV
Junction Temperature		T_j	125	℃
Storage Temperature Range		T_{stg}	-55 to + 150	℃

Characteristics at T_a = 25℃

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 1 mA, Pin 5 to GND	V_{BR}	6	-	V
Leakaeg Current at V_R = 5 V	I_R	-	0.5	μA
Clamping Voltage at I_{PP} = 1 A, tp = 8/20 μs, Any I/O Pin to GND at I_{PP} = 6 A, tp = 8/20 μs, Any I/O Pin to GND	V_C	- -	12 17	V
Junction Capacitance at V_R = 0 V, f = 1 MHz, Between I/O Pin to GND	$C_{i/o\text{-}GND}$	-	1	pF
Junction Capacitance at V_R = 0 V, f = 1 MHz, Between I/O Pins	$C_{i/o\text{-}i/o}$	-	0.5	pF

Dated: 17/03/2023 Rev: 04

Electrical Characteristic Curves

Fig 1. Pulse Waveform

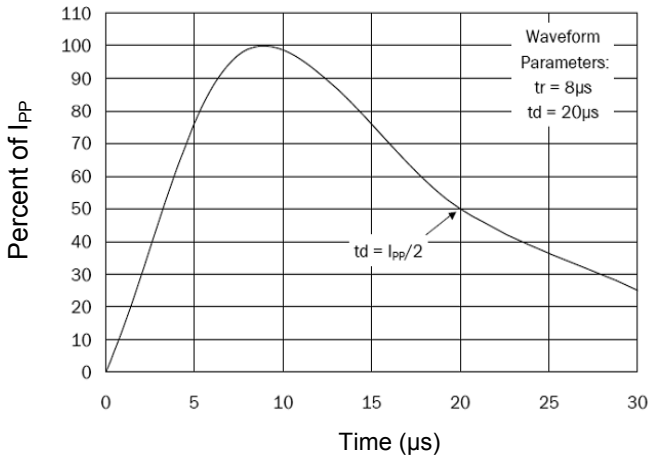


Fig 2. Power Derating Curve

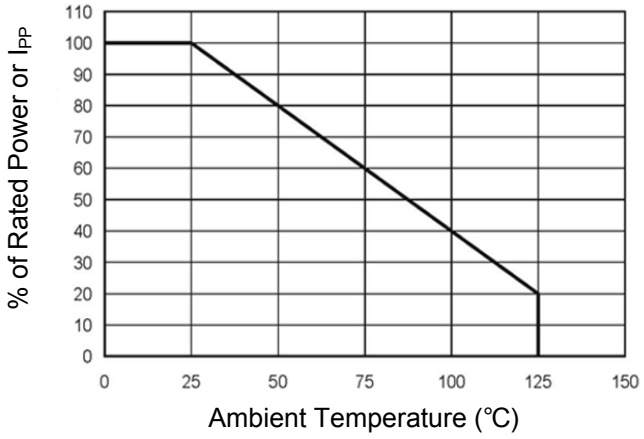


Fig 3. Clamping Voltage Curve

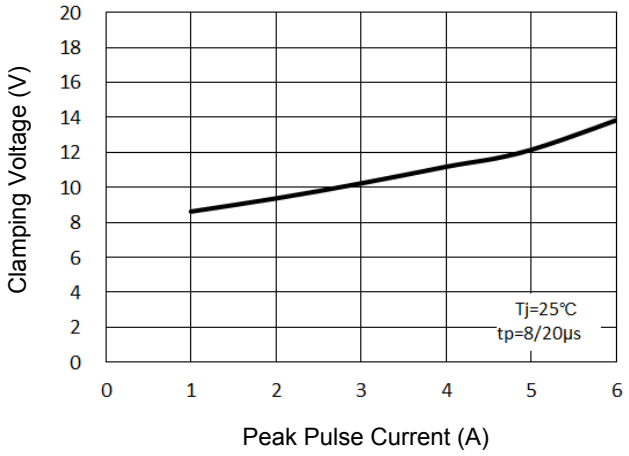


Fig 4. Junction Capacitance

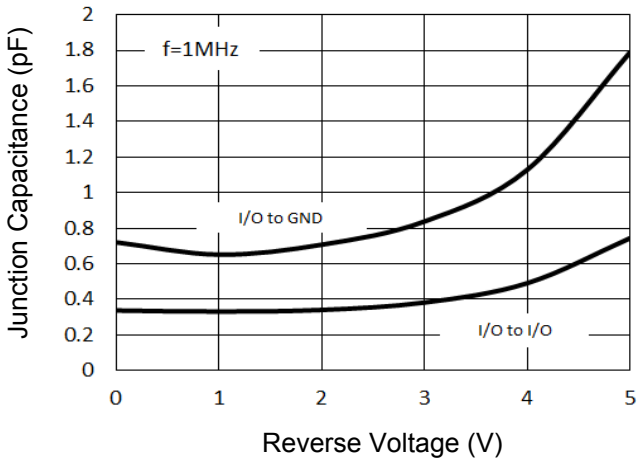
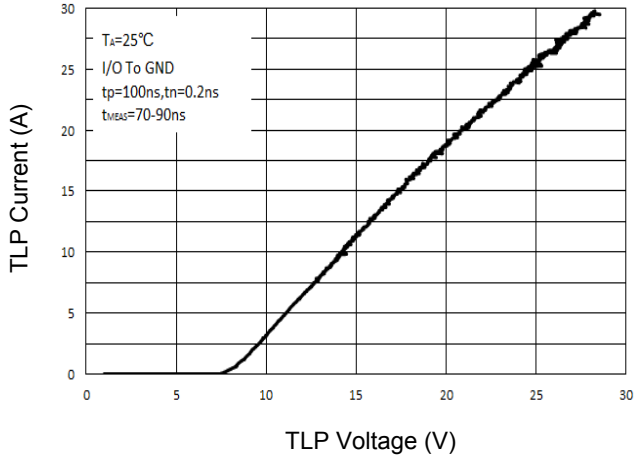
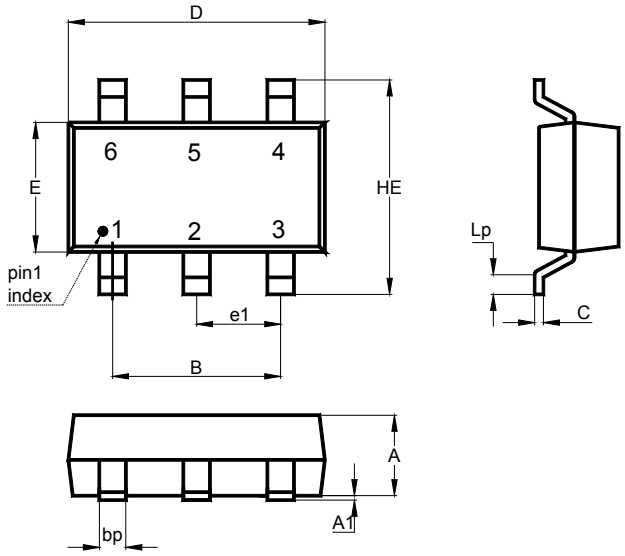


Fig. 5 TLP Curve

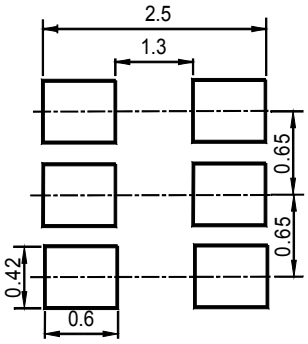


Package Outline (Dimensions in mm) SOT-363



Unit	A	A1	B	C	D	E	e1	HE	Lp	bp
mm	1.0 0.9	0.1 0	1.3 typ.	0.25 0.1	2.2 1.8	1.35 1.15	0.65 typ.	2.2 2.0	0.4 0.15	0.3 0.1

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

Marking information

" TF " = Part No.
" YM "= Date Code Marking
" Y " = Year
" M " = Month
Font type: Arial