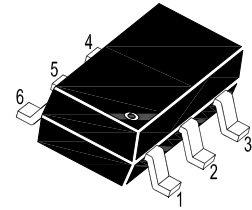
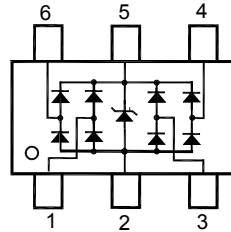


ESDLC054D

ESD Protection Diode

Features

- Low clamping voltage
- Low capacitance



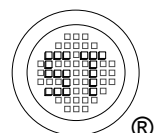
1. I/O1 2. GND 3. I/O2
4. I/O3 5. Vcc 6. I/O4
SOT-26 Plastic package

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ($t_p = 8/20 \mu\text{s}$)	P_{PK}	300	W
Peak Pulse Current ($t_p = 8/20 \mu\text{s}$)	I_{PP}	12	A
ESD per IEC 61000-4-2 (Air) ESD per IEC 61000-4-2 (Contact)	V_{ESD}	± 30	KV
Operation Junction Temperature Range	T_j	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Stand-Off Voltage at Pin 5 to 2	V_{RWM}	-	-	5	V
Reverse Breakdown Voltage at $I_T = 1 \text{ mA}$, Pin 5 to 2, Any I/O to GND	$V_{(BR)R}$	6	-	-	V
Reverse Current at $V_{RWM} = 5 \text{ V}$, Pin 5 to 2, Any I/O to GND	I_R	-	-	5	μA
Forward Voltage at $I_F = 15 \text{ mA}$	V_F	-	-	1.2	V
Clamping Voltage at $I_{PP} = 1 \text{ A}$, $t_p = 8/20 \mu\text{s}$, Any I/O Pin to GND at $I_{PP} = 5 \text{ A}$, $t_p = 8/20 \mu\text{s}$, Any I/O Pin to GND	V_C	-	-	12.5 17.5	V
Junction Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$, Any I/O Pin to GND at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$, Between I/O Pins	C_j	-	- 0.7	5 -	pF



ESDLC054D

Electrical Characteristics Curves

Fig 1. Pulse Waveform

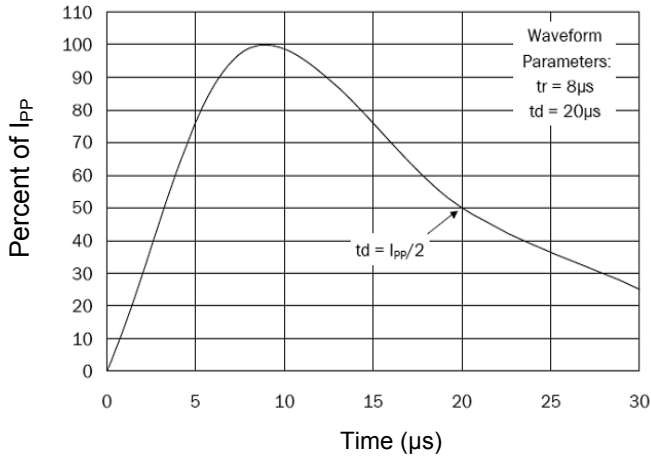


Fig 2. Power Derating Curve

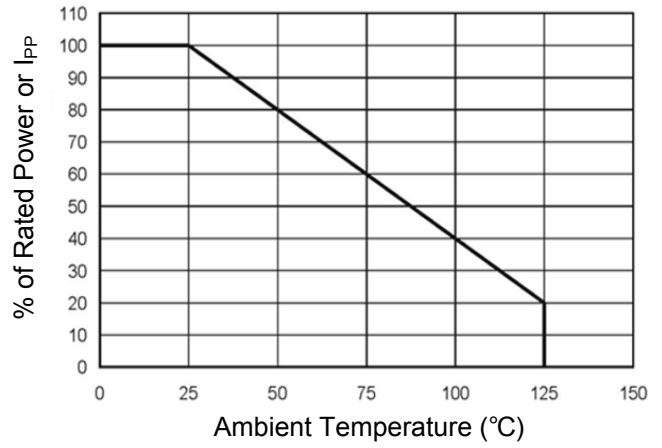


Fig 3. Clamping Voltage Curve

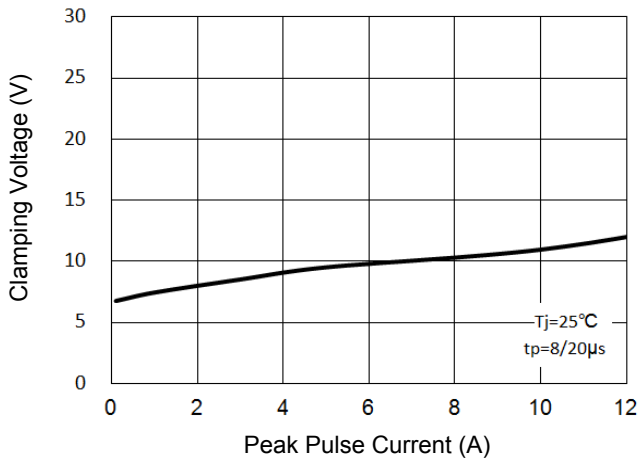


Fig 4. Junction Capacitance

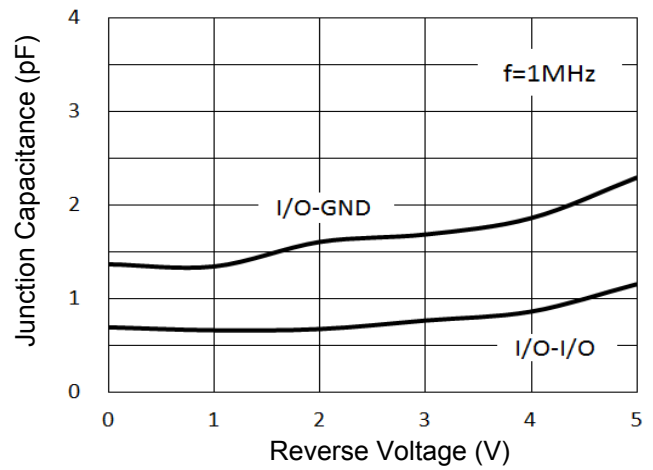
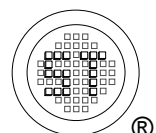
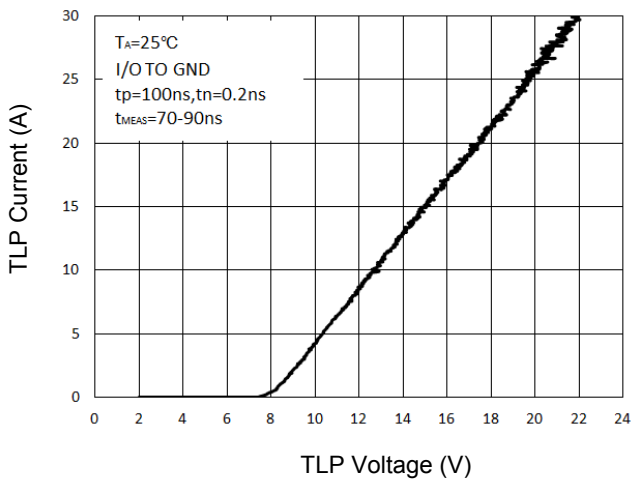


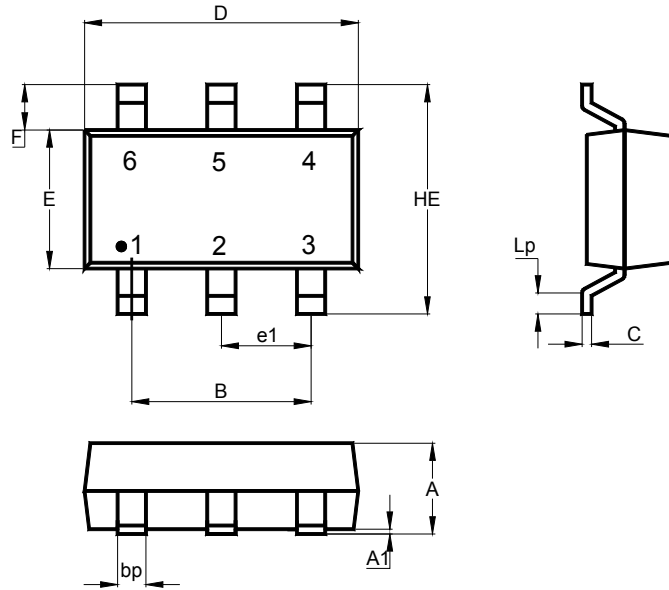
Fig 5 TLP Curve



ESDLC054D

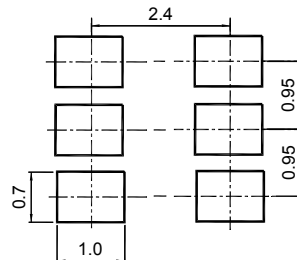
Package Outline (Dimensions in mm)

SOT-26



Unit	A	A1	B	C	D	E	e1	F	HE	Lp	bp
mm	1.2	0.1	2.1	0.20	3.1	1.7	0.95	0.65	3.0	0.6	0.5
	1.0	0	1.7	0.08	2.7	1.3	typ.	0.6	2.6	0.2	0.3

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-26	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" V5 " = Part No.
 "YM" = Date Code Marking
 "Y" = Year
 "M" = Month
 Font type: Arial

