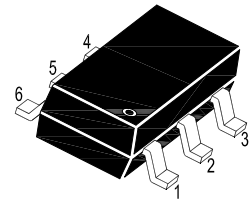
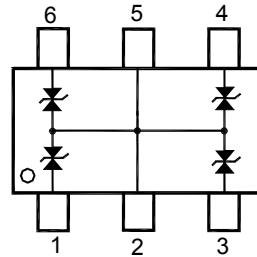


E5V0SBD4O

ESD Protection Diode

Features

- Low capacitance
- Low clamping voltage
- Ultra low leakage current



1. I/O1 2. GND 3. I/O2
4. I/O3 5. NC 6. I/O4
SOT-26 Plastic package
Marking Code : 5H

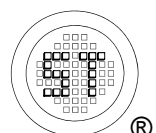
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Pulse Power ($t_p = 8/20 \mu\text{s}$)	P_{PK}	45	W
Peak Pulse Current ($t_p = 8/20 \mu\text{s}$)	I_{PP}	4.8	A
IEC61000-4-2 (ESD) Air Contact	V_{ESD}	± 30	KV
Operating 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
Working Peak Reverse Voltage	V_{RWM}	-	-	5	V
Reverse Breakdown Voltage at $I_R = 5 \text{ mA}$	$V_{(BR)R}$	5.8	-	7.8	V
Reverse Current at $V_{RWM} = 5 \text{ V}$	I_R	-	-	10	nA
Clamping Voltage at $I_{PP} = 4.8 \text{ A}$, $t_p = 8/20 \mu\text{s}$	V_C	-	-	12.5	V
Dynamic Resistance ¹⁾ at $I_R = 10 \text{ A}$	R_{dyn}	-	0.27	-	Ω
Differential Resistance at $I_R = 5 \text{ mA}$	R_{dif}	-	15.7	30	Ω
Junction Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$	C_j	-	9.7	13	pF

¹⁾ Non-repetitive current pulse, Transmission Line Pulse (TLP) $t_p = 100 \text{ ns}$; square pulse.



E5V0SBD40

Electrical characteristic curves

Fig 1. Pulse Waveform

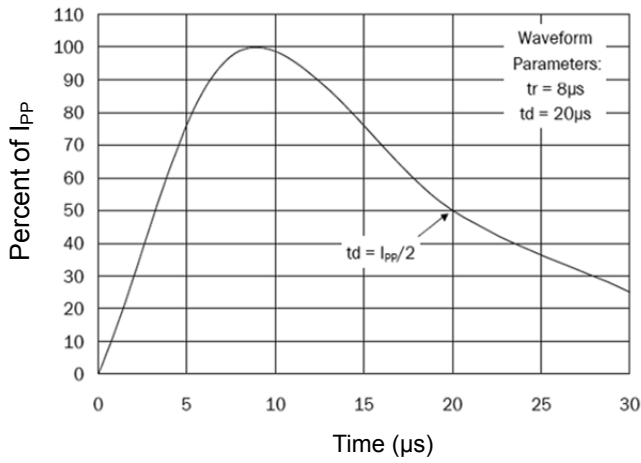


Fig 2. Power Derating Curve

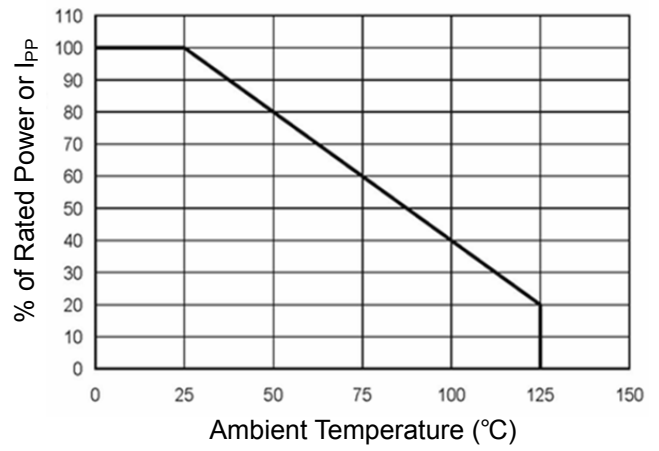


Fig 3. Clamping Voltage Curve

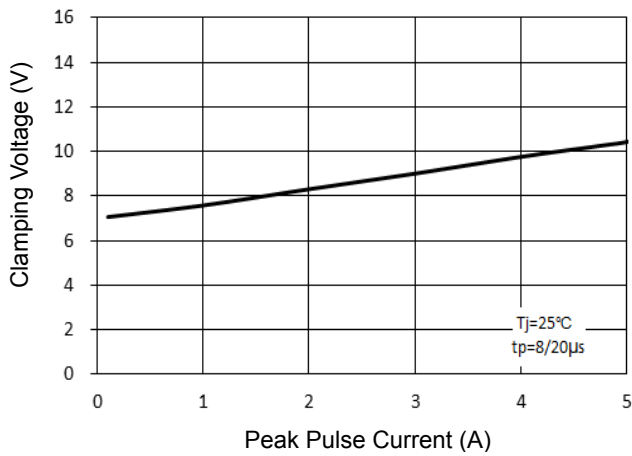


Fig 4. Junction Capacitance

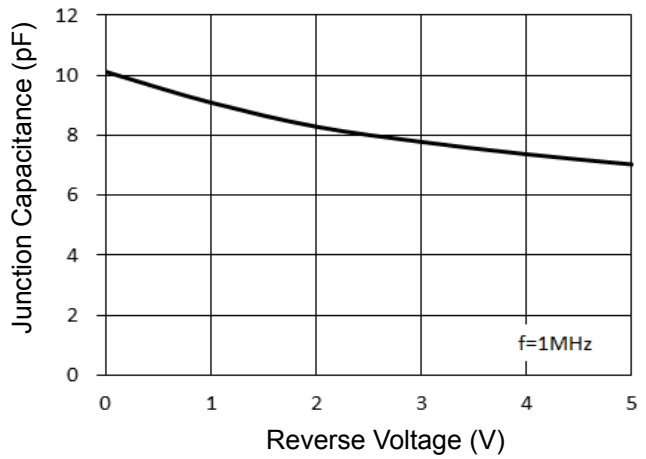
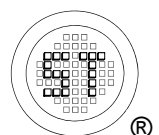
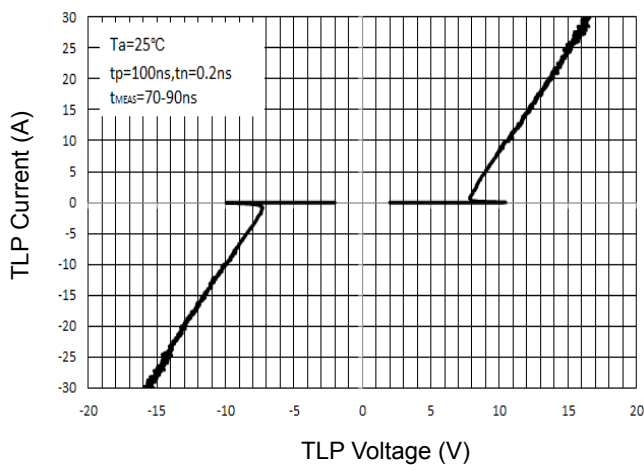


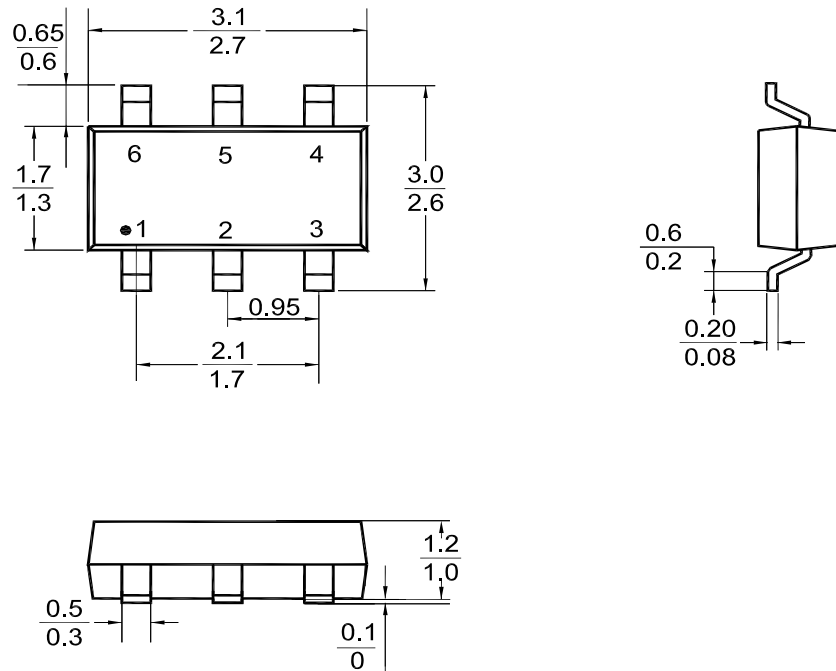
Fig 5 TLP Curve



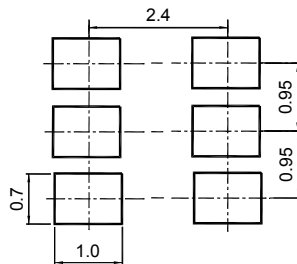
E5V0SBD40

Package Outline Dimensions (Units: mm)

SOT-26



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

- "5H" = Part No.
- "YM" = Date Code Marking
- "Y" = Year
- "M" = Month
- Font type: Arial

