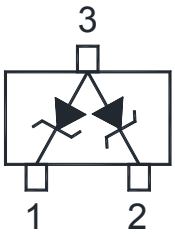
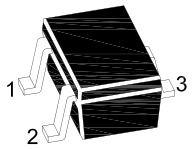
E5V0VUKC2CB-HAF

ESD Protection Diode

Features

- Low clamping voltage
- Ultra low capacitance
- Halogen and Antimony Free(HAF), RoHS compliant





1.Cathode 2.Cathode 3.Anode
SOT-523 Plastic Package

Absolute Maximum Ratings (T_a = 25℃ unless otherwise specified)

Parameter		Symbol	Value	Unit
Peak Pulse Power (tp = 8/20 μs)		P_{PK}	42	W
Peak Pulse Current (tp = 8/20 μs)		I_{PP}	3	A
ESD (IEC61000-4-2)	Air Contact	V_{ESD}	± 15 ± 8	KV
Operating Junction Temperature Range		T_j	- 55 to + 125	℃
Storage Temperature Range		T_{stg}	- 55 to + 150	℃

Characteristics (at Ta = 25℃ unless otherwise specified)

Parameter	Symbol	Min.	Max.	Unit
Reverse Working Voltage	V_{RWM}	-	5	V
Reverse Breakdown Voltage at I_R = 1 mA	$V_{(BR)R}$	6	-	V
Reverse Current at V_R = 5 V	I_R	-	0.2	μA
Clamping Voltage at I_{PP} = 1 A, tp = 8/20 μs at I_{PP} = 3 A, tp = 8/20 μs	V_C	- -	10 14	V
Junction Capacitance at V_R = 0 V, f = 1 MHz	C_j	-	0.5	pF

Dated: 21/01/2025 Rev : 01

Electrical Characteristics Curves

Fig 1. Pulse Waveform

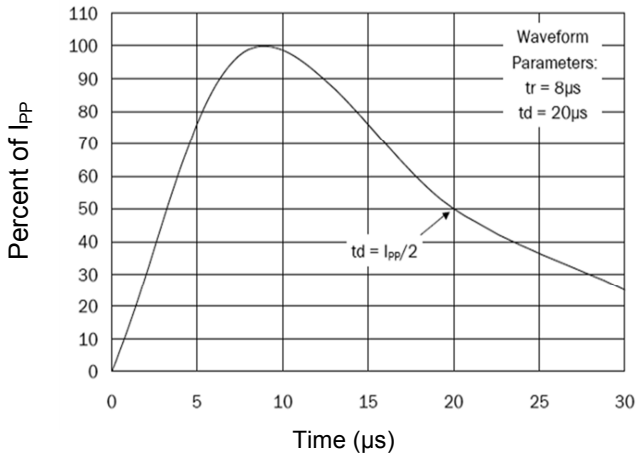


Fig 2. Power Derating Curve

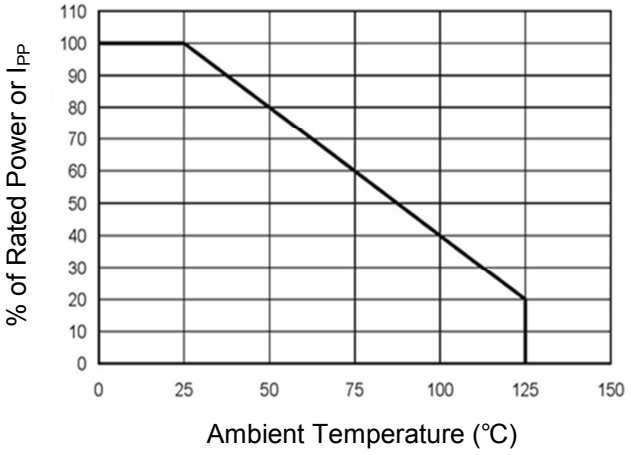


Fig 3. Clamping Voltage Curve

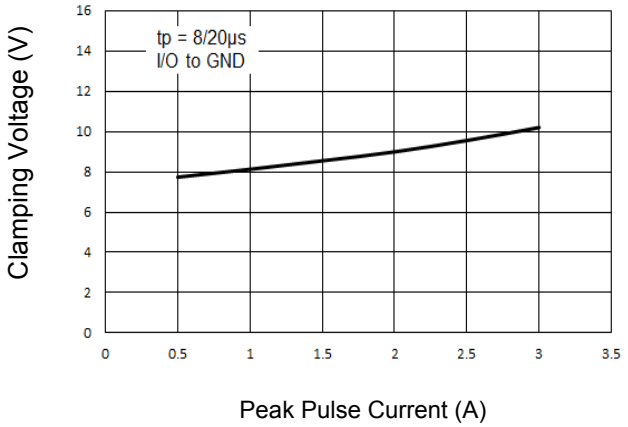


Fig 4. Junction Capacitance

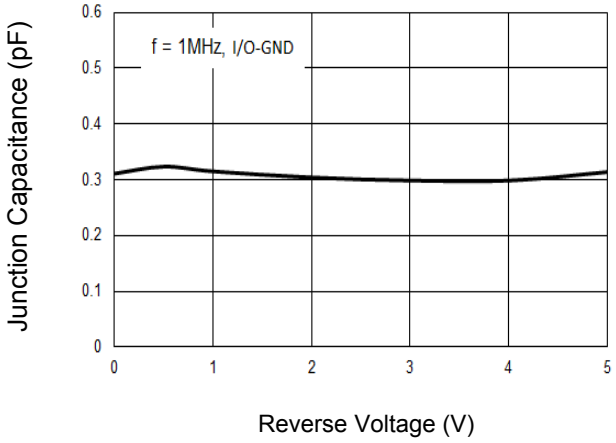
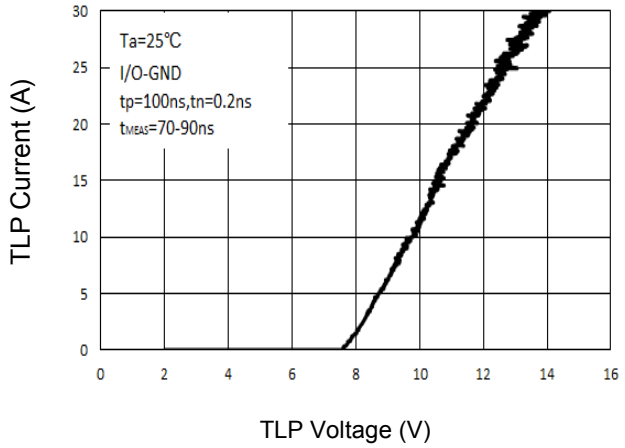


Fig. 5 TLP Curve



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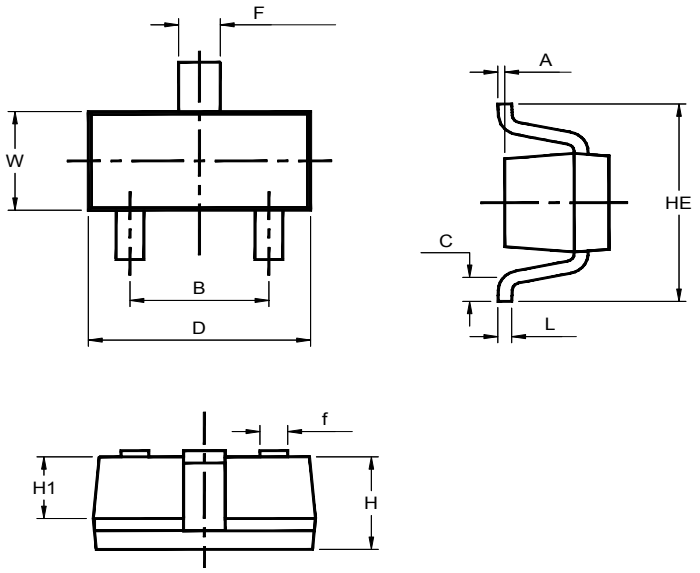
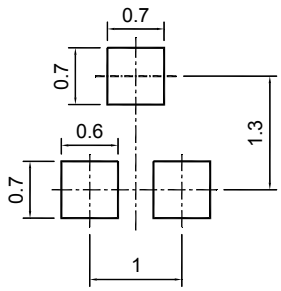
Package Outline Dimensions (Units: mm) SOT-523



UNIT	A	B	C	D	H	H1	HE	F	f	L	W
mm	0.1	1.05	0.17	1.7	0.85	0.6	1.7	0.35	0.25	0.15	0.9
	MAX.	0.95	MIN.	1.5	0.65	0.4	1.5	0.25	0.15	0.05	0.7

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-523	8	4 ± 0.1	0.157 ± 0.004	178	7	4,000

Marking information

" BC " = Part No.
" • " = HAF (Halogen and Antimony Free)
" YM " = Date Code Marking
" Y " = Year
" M " = Month
Font type: Arial