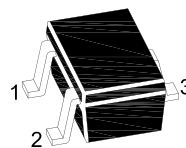
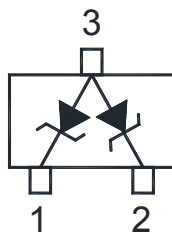


# E5V0VUKC2CB-HAF

## ESD Protection Diode

### Features

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



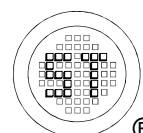
1.Cathode 2.Cathode 3.Anode  
SOT-523 Plastic Package

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

Parameter	Symbol	Value	Unit
Peak Pulse Power ( $t_p = 8/20 \mu\text{s}$ )	$P_{PK}$	42	W
Peak Pulse Current ( $t_p = 8/20 \mu\text{s}$ )	$I_{PP}$	3	A
ESD (IEC61000-4-2) Air Contact	$V_{ESD}$	$\pm 15$ $\pm 8$	KV
Operating Junction Temperature Range	$T_j$	- 55 to + 125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

### Characteristics (at $T_a = 25^\circ\text{C}$ unless otherwise specified)

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



Electrical Characteristics Curves

Fig 1. Pulse Waveform

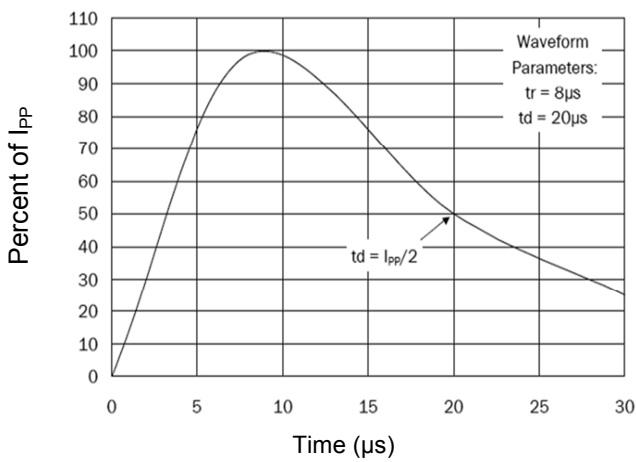


Fig 2. Power Derating Curve

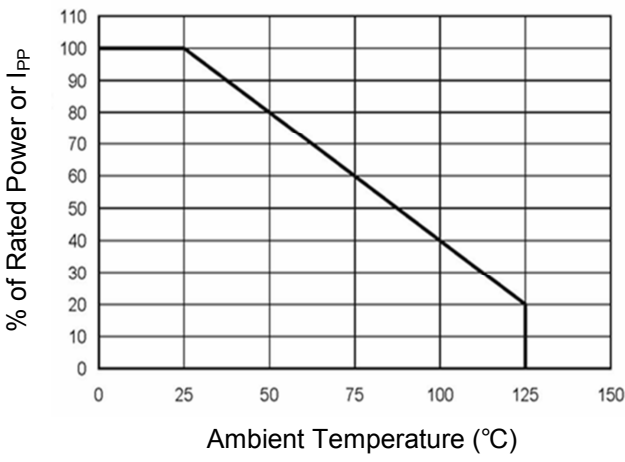


Fig 3. Clamping Voltage Curve

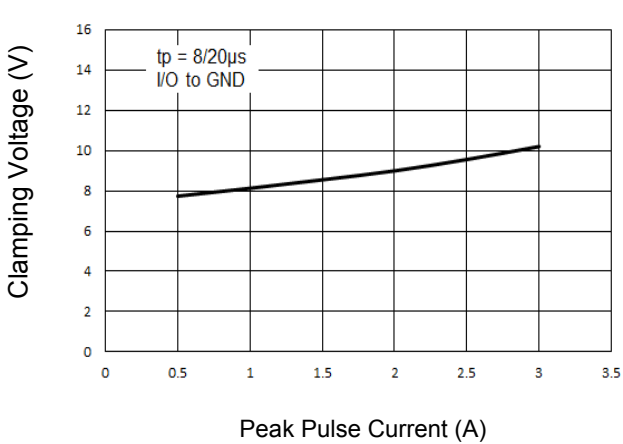


Fig 4. Junction Capacitance

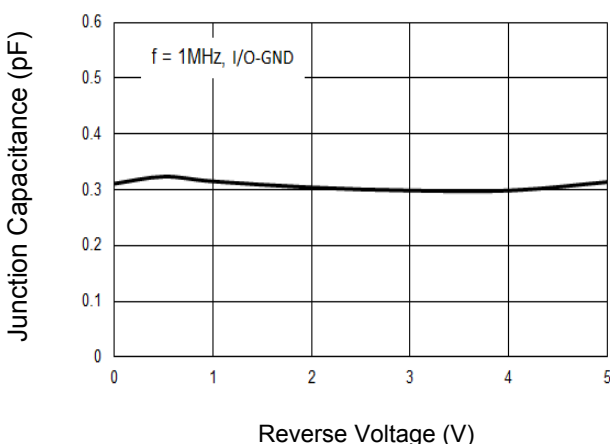
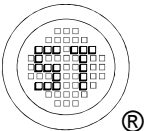
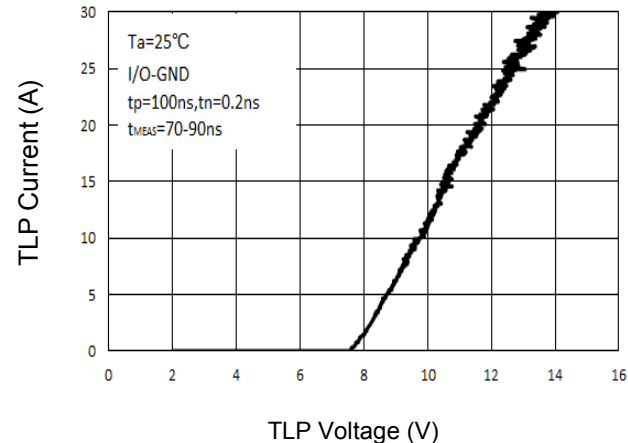


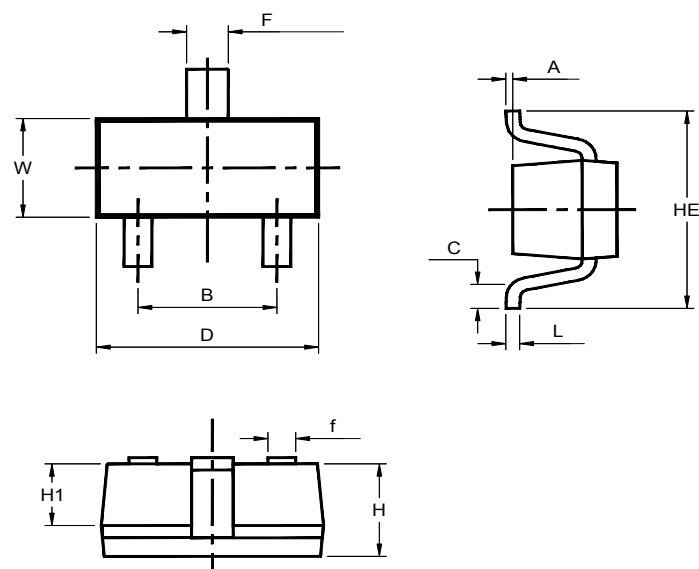
Fig. 5 TLP Curve



# E5V0VUKC2CB-HAF

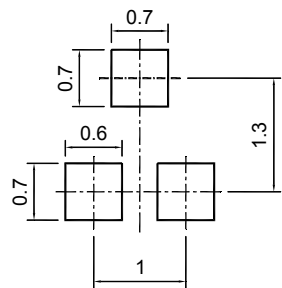
## Package Outline Dimensions (Units: mm)

SOT-523



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

## Recommended Soldering Footprint

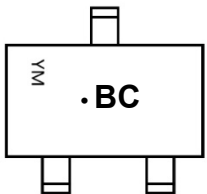


## Packing information

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



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