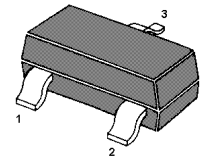
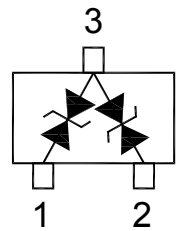


E24SBKA2BA-CH

ESD Protection Diode

Features

- AEC-Q101 Qualified
- Low clamping voltage
- Ultra low leakage current
- Double Bi-direction high reliability
- Halogen and Antimony Free(HAF), RoHS compliant



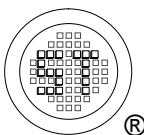
1. Anode 2. Anode 3. Anode
SOT-23 Plastic Package

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}	300	W
Peak Pulse Current ($t_p = 8/20 \mu\text{s}$)	I_{PP}	6	A
ESD (IEC61000-4-2) Air Contact	V_{ESD}	± 30 ± 30	KV
Operating Junction Temperature	T_j	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}	-	-	24	V
Reverse Breakdown Voltage at $I_R = 5 \text{ mA}$ at $I_R = 10 \text{ mA}$	$V_{(BR)R}$	26.7 25.5	- -	32 35.5	V
Reverse Current at $V_{RWM} = 24 \text{ V}$	I_R	-	-	50	nA
Clamping Voltage at $I_{PP} = 1 \text{ A}$, $t_p = 8/20 \mu\text{s}$ at $I_{PP} = 6 \text{ A}$, $t_p = 8/20 \mu\text{s}$	V_C	- -	- -	40 50	V
Junction Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$, Pin 3 to Pin 1 or Pin 3 to Pin 2	C_j	-	15	-	pF



Electrical Characteristics Curves

Fig 1. Pulse Waveform

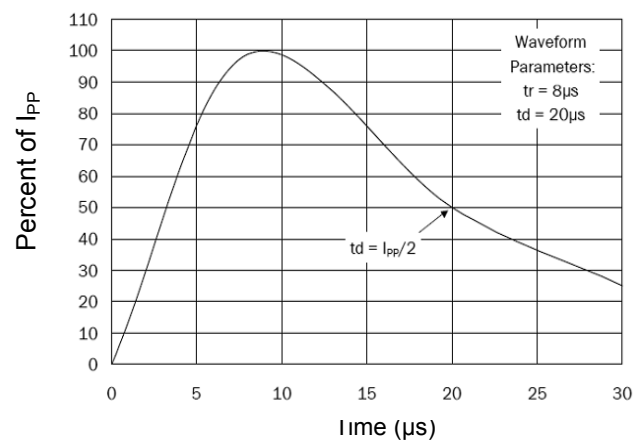


Fig 2. Power Derating Curve

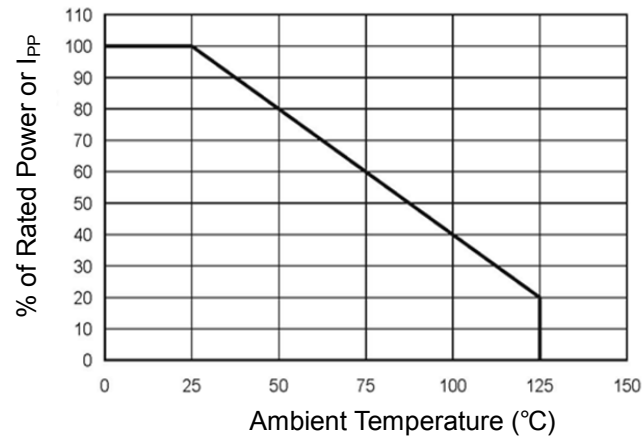


Fig 3. Clamping Voltage Curve

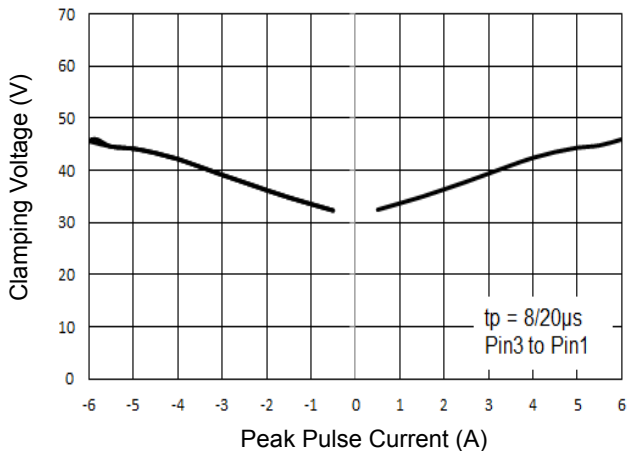


Fig 4. Junction Capacitance

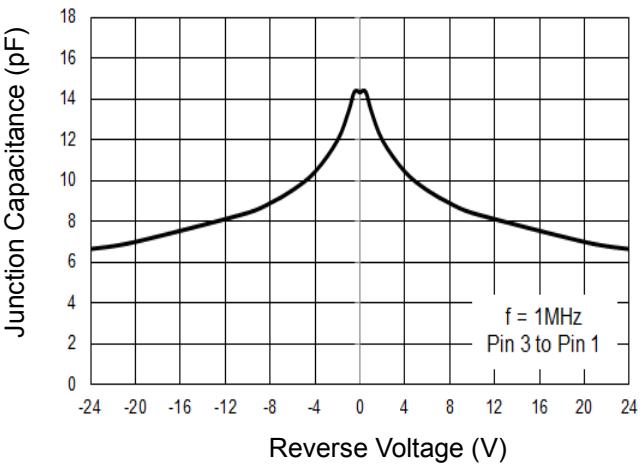
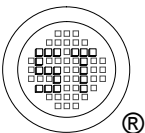
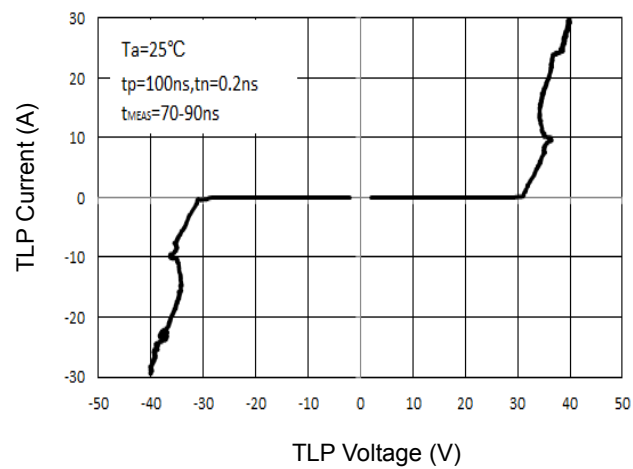


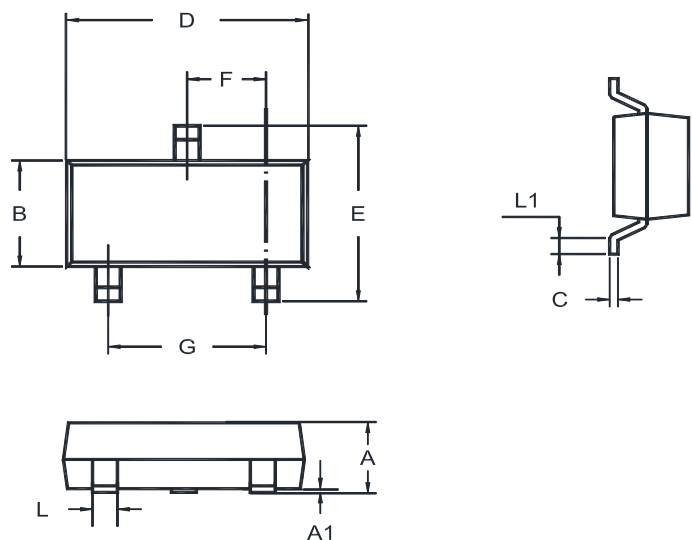
Fig. 5 TLP Curve



E24SBKA2BA-CH

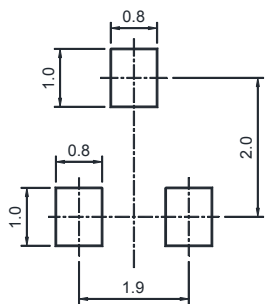
Package Outline (Dimensions in mm)

SOT-23



Unit	A	A1	B	C	D	E	F	G	L	L1
mm	1.20 0.89	0.100 0.013	1.40 1.20	0.19 0.08	3.04 2.80	2.6 2.2	1.02 0.89	2.04 1.78	0.51 0.37	0.2 MIN

Recommended Soldering Footprint

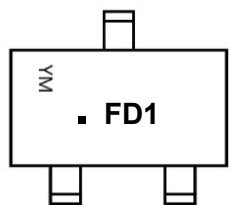


Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-23	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" FD1 " = Part No.
" . " = HAF (Halogen and Antimony Free)
" YM " = Date Code Marking
" Y " = Year
" M " = Month
Font type: Arial



Disclaimer: Our company reserve the right to make modifications, enhancements, improvements, corrections or other changes to improve product design, functions and reliability, anytime without notice. Semtech Electronics Limited makes no warranties, representations or warranties regarding the suitability of its products for any particular purpose, and does not accept any liability arising from the application or use of any product or circuit such as: Apply to medical, military, aircraft, space or life support equipment and expressly waive any and all liability, including but not limited to special, consequential or collateral damage.

