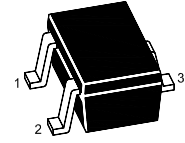
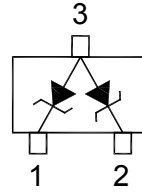


ESD6V8CAW

ESD Protection Diode



SOT-323 Plastic Package
1. Cathode 2. Cathode 3. Anode

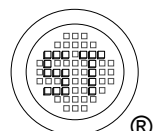
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Power Dissipation	P_D	200	mW
IEC61000-4-2 (ESD) Contact	V_{ESD}	± 8	KV
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 125	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Zener Voltage ¹⁾ at $I_Z = 5 \text{ mA}$	V_Z	6.5	6.8	7.1	V
Dynamic Impedance at $I_Z = 5 \text{ mA}$	Z_Z	-	-	50	Ω
Knee Dynamic Impedance at $I_Z = 0.5 \text{ mA}$	Z_{ZK}	-	-	100	Ω
Reverse Current at $V_R = 5 \text{ V}$	I_R	-	-	0.5	μA
Clamping Voltage at $I_{PP} = 2 \text{ A}$, $t_p = 8/20 \mu\text{s}$ at $I_{PP} = 9.37 \text{ A}$, $t_p = 8/20 \mu\text{s}$	V_C	-	-	9.6 16	V
Total Capacitance at $V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$	C_T	-	36	-	pF

¹⁾ Tested with pulses $t_p = 20 \text{ ms}$.



Electrical Characteristics Curves

Fig 1. Zener Characteristics Curve

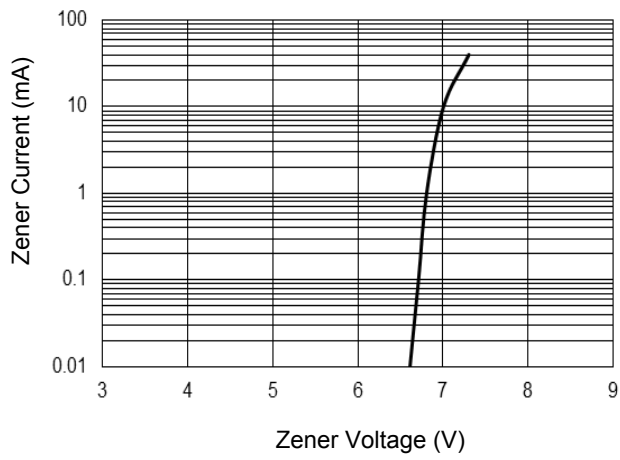
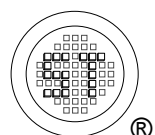
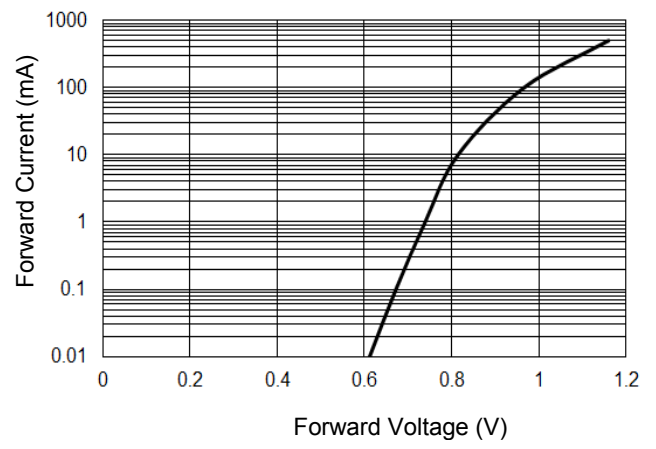


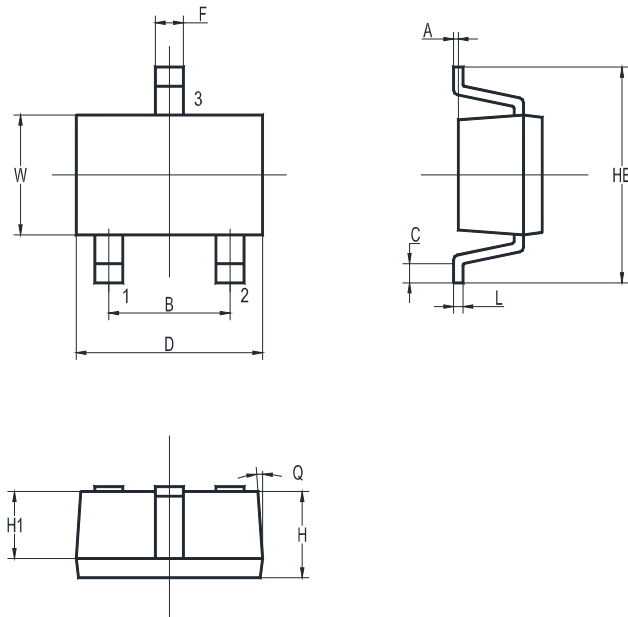
Fig 2. Forward Characteristics Curve



ESD6V8CAW

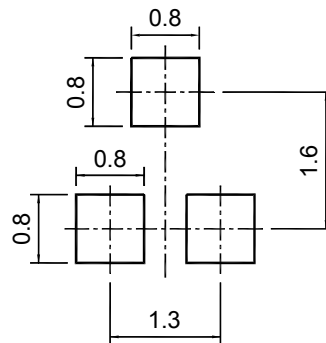
Package Outline Dimensions (Units: mm)

SOT-323



UNIT	A	B	C	D	H	H1	HE	F	L	W	Q
mm	0.1 MAX.	1.4 1.2	0.2 MIN.	2.1 1.9	1.0 0.8	0.7 TYP.	2.4 2.0	0.35 0.25	0.15 0.05	1.35 1.15	5° MAX.

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOT-323	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

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

