

### **Discription**

The HAZ5A23-01F protects sensitive semiconductor components from damage or upset due to electrostatic discharge (ESD) and other voltage induced transient events. Excellent clamping capability, low leakage, low capacitance, and fast response time provide best in class protection on designs that are exposed to ESD.

It gives designer the flexibility to protect one bi-directional line in applications where arrays are not practical.



DFN0603-2L

#### **Features**

- ★ Small Body Outline Dimensions: 0.61 mm x 0.31 mm
- ★ Low Body Height: 0.28 mm
- ★ Low Leakage
- ★ Response Time is Typically < 1 ns</p>
- ★ ESD Rating of Class 3 per Human Body Model
- ★ IEC61000-4-2 Level 4 ESD Protection
- ★ These are Pb-Free Devices
- ★ We declare that the material of product compliance with RoHS requirements and Halogen Free.

## 10 0 2

Circuit Diagram

### **Orderingin formation**

Product ID	Pack	Qty(PCS)	
HAZ5A23-01F	DFN0603-2L	15000	

### Absolute Ratings(Tamb = 25°C)

Symbol	Parameter	Value	Units	
P <sub>PP</sub>	Peak Pulse Power (t <sub>p</sub> = 8/20μs)	90	W	
T <sub>L</sub>	Maximum lead temperature for soldering during 10s		260	°C
T <sub>stg</sub>	Storage Temperature Range		-55 to +150	°C
T <sub>op</sub>	Operating Temperature Range		-40 to +125	°C
Tj	Maximum junction temperature		150	°C
	IEC61000-4-2 (ESD) air disch contact disch		±25 ±20	KV



### **Electrical Characteristics**

	V <sub>RWM</sub> (V)	I <sub>R</sub> (μΑ) @ V <sub>RWM</sub>		V) @ I <sub>T</sub> ote 2)	Ι <sub>Τ</sub>	V <sub>C</sub> (V) @ I <sub>PP</sub> = 1 A (Note 3)	V <sub>C</sub> (V) @MAX I <sub>PP</sub> (Note 3)	I <sub>PP</sub> (A) (Note 3)	P <sub>PK</sub> (W) (Note 3)	C (pF)
Device	Max	Max	Min	Max	mA	Max	Max	Max	Max	Тур
HAZ5A23-01F	3.3	0.1	5.0	6.5	1.0	7	10	5	90	12

Other voltage available upon request.

- 3. Surge current waveform per Figure 1.

## **Typical Characteristics**

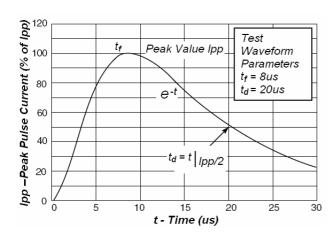


Fig1. Pulse Waveform

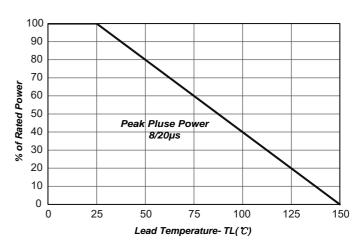


Fig2.Power Derating Curve

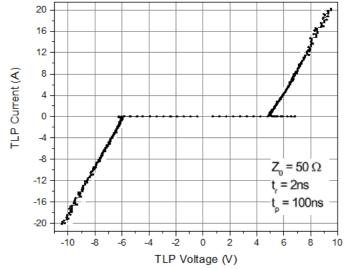
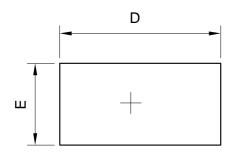
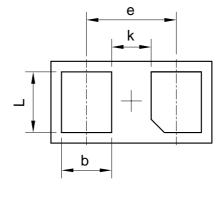


Fig3.TLP Measurement

### **Outline And Dimensions**





**TOP VIEW** 

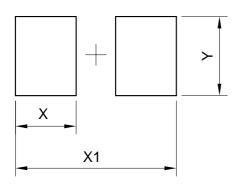
**BOTTOM VVIEW** 

DFN0603-2L					
Dim	Min	Тур.	Max		
D	0.58	0.61	0.64		
Е	0.28	0.31	0.34		
е	-	0.34	-		
L	0.20	0.23	0.26		
b	0.16	0.19	0.22		
Α	0.25	0.28	0.31		
k	0.12	0.15	0.18		
All Dimensions in mm					



SSIDE VIEW

# **Soledering Footprint**



DFN0603-2L		
DIM	(mm)	
Χ	0.23	
X1	0.61	
Υ	0.30	



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