

# ESD11D5V0C Transient Voltage Suppressors ESD Protection Diode

#### **General description**

Silicon Diode in a DFN0603 Package.

#### **FEATURES**

- Capacitance Typ. 15pF
- Small Body Outline Dimensions
- · Low Leakage Current
- Response Time is Typically < 1ns</li>
- ESD Rating of Class 3 (>16kV) per Human Body Model
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Weight: approx. 0.24mg

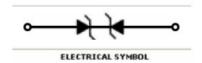
### Green Product



**DFN0603 Package** 

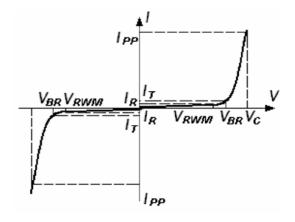
## **Absolute Maximum Ratings** (T<sub>A</sub> = 25°C unless otherwise noted)

Symbol	Parameter	Value	Units
PD	Total Power Dissipation on FR-5 Broad	150	mW
T∟	Max Lead Solder Temperature range (10 Second Duration)	260	°C
$T_{stg}$	Storage Temperature Range	-55 to +150	°C
TJ	Junction Temperature	+150	°C
ESD	IEC61000-4-2 Air Discharge Contact Discharge	±15 ±8	KV
EFT	IEC61000-4-4	40	Α
ESD	Per Human Body Model	16	KV



#### **Electrical Parameter**

Symbol	Parameter			
I <sub>PP</sub>	Maximum Reverse Peak Pulse Current			
Vc	Clamping Voltage @ I <sub>PP</sub>			
V <sub>RWM</sub>	Working Peak Reverse Voltage			
I <sub>R</sub>	Maximum Reverse Leakage Current @ V <sub>RWM</sub>			
I <sub>T</sub>	Test Current			
V <sub>BR</sub>	Breakdown Voltage @ I <sub>T</sub>			
-				



#### Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Device Type	Vrwm (Volts)	Ir @ Vrwm (µA)	V <sub>BR</sub> @ I <sub>T</sub> (Note 1) (Volts)		I <sub>T</sub> (mA)	V <sub>c</sub> @ I <sub>PP</sub> *=1A (Volts)	V <sub>c</sub> @ Max I <sub>PP</sub> (Volts)	Max I <sub>PP</sub> *	C @ <b>V</b> <sub>R</sub> = 0V, f = 1MHz (pF)
	Max	Max	Min	Max		Max	Max		Тур.
ESD11D5V0C	5.0	0.5	5.6		1.0	9.8	12.5	5.5	15



#### SURGE CURRENT WAVEFORM:

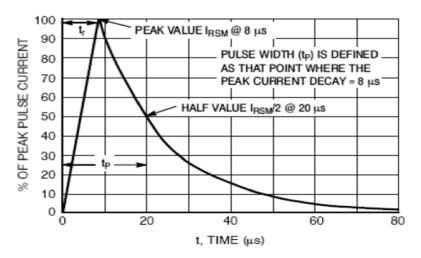
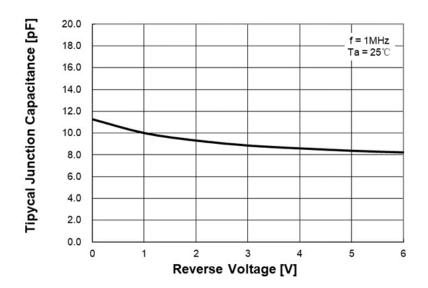


Figure 1. 8 x 20 µs Pulse Waveform

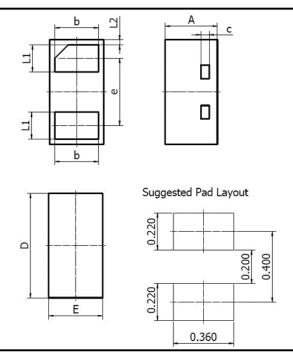
#### **CAPACITANCE CURVE:**



## ESD11D5V0C



## DFN0603 Package Outline



5.04	MILLIM	ETERS 4	INCHES ~		
DIM ←	MIN →	MAX 4	MIN +	MAX 4	
A ·	0.27 ←	0.35 ↔	0.011 ↩	0.013 ↔	
D ·	0.57 ←	0.67 ↔	0.022 ↔	0.026 ↔	
E٠	0.27 ←	0.37 ↔	0.011 ↩	0.015 ↔	
b ·	0.225 ↔	0.295 ↔	0.009 ↔	0.012 ↔	
C ·	0.050REF ↔		0.002REF ↔		
e ·	0.365 ₽	0.435 ↔	0.014 ↔	0.017 ↔	
L1 +	0125	0.195	0.005 ↔	0.008 ↔	
L2 +	0.030REF ↔		0.001REF ↔		



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