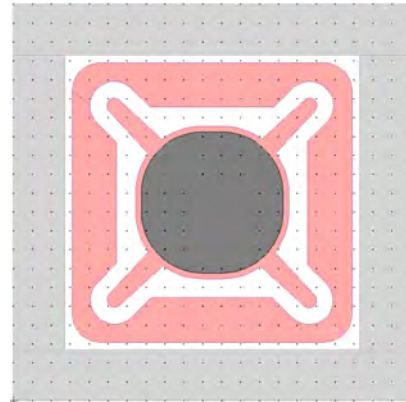


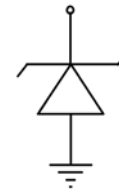
Features

- 1-Channel Uni-directional ESD diode
- Low Operating Voltage: 5.0V
- Ultra Low Leakage: nA Level
- Ultra Low Capacitance:
0.5pF when I/O to GND
- Low Clamping Voltage
- Response time is typically < 1 ns
- RoHS compliant
- Ultra Small Die Size, suitable for DFN0603
or DFN1006 package
- Complies with IEC 61000-4-2 standards:
Air discharge: $\pm 20\text{kV}$
Contact discharge: $\pm 15\text{kV}$

Die Top-View



Circuit Diagram



From top to backside

Wafer Information

Item	Description
Wafer size	6 inch
Wafer thickness	$150 \pm 10\mu\text{m}$
Die Size (Include scribe lane)	$210\mu\text{m} \times 210\mu\text{m}$
Bond Pad Opening	$75\mu\text{m} \times 75\mu\text{m}$
Scribe lane width	$50\mu\text{m}$
Gross die per wafer	357,000 dies
Top metal for wire bond	$4\mu\text{m}$ AlSiCu
Back side metal	TiNiAg
Passivation thickness	$1.2\mu\text{m}$

Absolute Maximum Ratings (TA=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P _{pk}	70	W
Peak Pulse Current (8/20μs)	IPP	4	A
ESD per IEC61000-4-2 (Air)	V _{ESD}	±20	kV
ESD per IEC61000-4-2 (Contact)		±15	
Operating Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V _{RWM}			5	V	
Breakdown Voltage	V _{BR}	6.5	7.5	9.0	V	I _T =1mA
Leakage Current	I _{Leak}			100	nA	V _{RWM} =5V
Clamping Voltage	V _C			9	V	I _{PP} =1A, T _p =8/20μs
Clamping Voltage	V _C			14	V	I _{PP} =4A, T _p =8/20μs
Junction Capacitance (I/O to GND)	C _J		0.5	0.6	pF	V _R =0V, f=1MHz,

Note: Electrical parameters are only for die, performance may alter after assembly.

NOTICE

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