LM803ESDCP8-0.2

Features

- 1-Channel Bi-directional ESD diode
- Low Operating Voltage: 3.3 V
- Ultra Low Leakage: nA Level
- Low Clamping Voltage
- Response time is typically < 1 ns
- RoHS compliant
- Ultra Small Die Size, suitable for DFN1006 or DFN0603 package
- Complies with IEC 61000-4-2 standards:

  Air discharge: ±30kV

  Contact discharge: ±30kV

Die Top-View

Circuit Diagram

Wafer Information

Item	Description
Wafer size	8 inch
Wafer thickness	150±10μm
Die Size (Include scribe lane)	200μm x 200μm
Bond Pad Opening	ø120μm
Scribe lane width	40μm
Gross die per wafer	700, 000 dies
Top metal for wire bond	4μm AlSiCu
Back side metal	TiNiAg

Absolute Maximum Ratings (TA=25℃ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P_{pk}	60	W
ESD per IEC61000-4-2 (Air) ESD per IEC61000-4-2 (Contact)	V_{ESD}	±30 ±30	kV
Operating Temperature Range	T_J	-55 to +150	℃
Storage Temperature Range	T_{stg}	-55 to +150	℃

Electrical Characteristics (TA=25℃ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V_{RWM}			3.3	V	
Breakdown Voltage	V_{BR}	4.5	5.2	6.5	V	I_T=1mA
Snap-Back Voltage	V_{PT}		5.7		V	I_{PT}=10nA
Leakage Current	I_{Leak}	1		100	nA	V_{RWM}=3.3V
Clamping Voltage	V_C			7	V	I_{PP}=1A,Tp=8/20μs
Clamping Voltage	V_C			9	V	I_{PP}=8A,Tp=8/20μs
Junction Capacitance	C_J		15	20	pF	V_R=0V, f=1MHz

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

Shanghai Leiditech Electronic Technology Co., Ltd.
Email: sale1@leiditech.com
Tel : +86- 021 50828806
Fax : +86- 021 50477059