LM870ULCP22-0.185

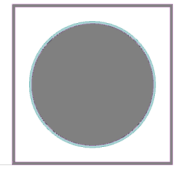
Features

- 1-Channel Ui-directional ESD diode
- Operating Voltage: >100V
- Ultra Low Leakage: nA Level
- Low Clamping Voltage
- Response time is typically < 1 ns
- RoHS compliant
- Ultra Small Die Size, suitable for SOD-323 package
- Complies with IEC 61000-4-2 standards:

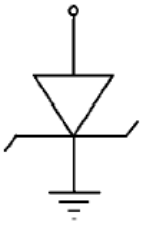
  Air discharge: ±25kV

  Contact discharge: ±20kV

Die Top-View



Circuit Diagram



From top to backside

Wafer Information

Item	Description
Wafer size	8 inch
Wafer thickness	150±10μm
Die Size (Include scribe lane)	185μm x 185μm
Bond Pad Opening	ø 110 μm
Scribe lane width	40μm
Gross die per wafer	860, 000 dies
Top metal for wire bond	5μm ALSiCu
Back side metal	TiNiAg

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

Parameter	Symbol	Value	Unit
Peak Pulse Power (8/20μs)	P_{pk}	240	W
ESD per IEC61000-4-2 (Air) ESD per IEC61000-4-2 (Contact)	V_{ESD}	±25 ±20	kV
Operating Temperature Range	T_J	-55 to +125	℃
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}			70	V	
Forward Voltage	V_F	0.4	0.7	1.2	V	I_T=1mA
Leakage Current	I_{Leak}			500	nA	V_{RWM}=70.0V
Clamping Voltage(VF)	V_C			10	V	I_{PP}=22A,Tp=8/20μs
Junction Capacitance	C_J		0.5	1.0	pF	V_R=0V, f=1MHz

Note:

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

NOTICE

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