

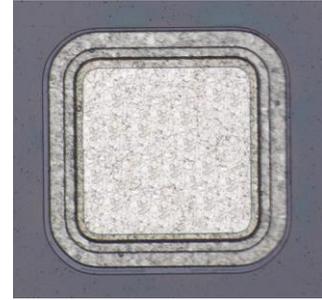
ESD Protection Diode

Features

- For sensitive ESD protection
- Low leakage
- Bi-directional ESD protection of one line
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Mechanical Data

- **Package:** DFN1006
- **Terminals:** Tin plated leads, solderable per



■ TES220BC3V3AG1-155A

Die Size (Include Scribing Lane)	220um*220um
Thickness	155±15um
Pad Size	120*120 μ m ²
Scribing Lane	40 μ m
Top Metal	AlSiCu: 2.5±0.3μm
Back Metal	Au: 1.2um
Wafer Size	Φ 150 mm
Gross Die	330202

■ Maximum Ratings

PARAMETER	SYMBOL	LIMITS	UNIT
Operating Junction & Storage Temperature	T _J &T _{STG}	-45 to +125	°C
IEC61000-4-2(ESD)Air	VESD ⁽¹⁾	±30	KV
IEC61000-4-2(ESD)Contact		±8	KV
Peak Pulse Current	I _{PP} ⁽²⁾	10	A

(1).Device stressed with ten non-repetitive ESD pulses.

(2).Non-repetitive current pulse 8/20μs exponential decay waveform according to IEC61000-4-5.

■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max	I-V Characteristics
Reverse Standoff Voltage	V _{RWM}	V	/			3.3	
Reverse Leakage Current (GND-IO)	I _R	uA	V _{RWM} =3.3V			1	
Breakdown Voltage (GND-IO)	V _(BR)	V	I _T =1mA	3.5	4.8	5.8	
Clamping Voltage (GND-IO)	V _C	V	I _{PP} =10A			10	
Reverse Leakage Current (IO-GND)	I _R	uA	V _{RWM} =3.3V			1	
Breakdown Voltage (IO-GND)	V _(BR)	V	I _T =1mA	3.5	4.8	5.8	
Clamping Voltage (IO-GND)	V _C	V	I _{PP} =10A			10	
Junction Capacitance	C _J	pF	V _R =0V, f=1MHz		15		

(1).Other voltages available upon request.

(2).Non-repetitive current pulse 8/20 μ s exponential decay waveform according to IEC61000-4-5



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