

HESDR0524PMUTAG ESD PROTECTION DIODE

Discription

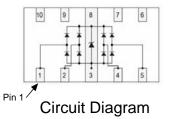
The HESDR0524PMUTAG is a 4-channel ultra low capacitance rail clam ESD protection diodes array . Each channel consists of a pair of diodes that steer positive or negative ESD current to either the positive or negative rail . A zener diode is integrated in to the array between the positive and negative supply rails. In the typical applications, the negative rail pin (assigned as GND) is connected with system ground . The Positive ESD current is steered to the ground through an ESD diode and Zener diode and the positive ESD voltage is clamped to the zener voltage.

Features

- ★ 4 channels of ESD protection;
- ★ Provides ESD protection to IEC61000-4-2 level 4
 - ±25kV air discharge
 - ±20kV contact discharge;
- ★ Ultra-low Capacitance:0.4pF(Typical)
- ★ Low clamping voltage;
- ★ Low operating voltage;
- ★ Solid-state silicon technology
- ★ Protecting four I/O line
- ★ RoHS compliant and Halogen Free.



DFN2510-10L



Orderingin formation

Product ID	Pack	Qty(PCS)
HESDR0524PMUTAG	DFN2510-10L	3000

Absolute Ratings(Tamb = 25°C)

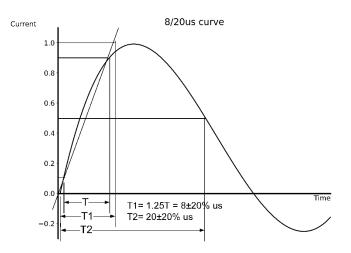
Symbol	Parameter	Value	Units
P _{PP}	Peak Pulse Power (t _p = 8/20µs)	50	W
I _{PP}	Peak Pulse Current(8/20us)	3	А
TL	Maximum lead temperature for soldering during 10s	260	°C
T _{stg}	Storage Temperature Range	-55 to +150	°C
T _{op}	Operating Temperature Range	-40 to +125	°C
Tj	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD) air discharge	±25	KV
	contact discharge	±20	IXV



Electrical Characteristics (Ta= 25°C)

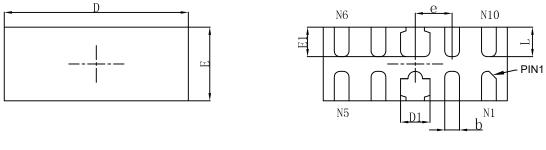
Symbol	Parameter	Test Condition	Min	Тур	Max	Units
Vrwm	Reverse Working Voltage	Any I/O pin to GND			5.0	V
V _{BR}	Reverse Breakdown Voltage	I⊤ = 1mA Any I/O pin to GND	6.0	7.5	8.5	V
IR	Reverse Leakage Current	V _{RWM} = 5.0V			1.0	μA
Vc	Clamping Voltage	$I_{RWM} = 1A, t_p = 8/20 \mu s$			10	V
VC		$I_{RWM} = 3A, t_p = 8/20 \mu s$			15	V
CJ	Junction Capacitance	$V_R = 0V$, f = 1MHz Any I/O pin to GND		0.4	0.5	pF
С	Junction Capacitance	$V_R = 0V$, f = 1MHz Any I/O pin to I/O		0.2	0.25	pF

Typical Characteristics

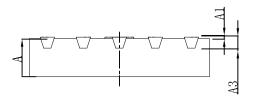




Outline And Dimensions



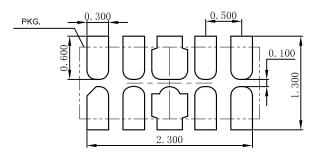




Side View

Symbol	Dimensions In Millimeters		Dimensions In Inches		
Symbol	Min.	Max.	Min.	Max.	
А	0.450	0.550	0.017	0.022	
A1	0.000	0.050	0.000	0.002	
A3	0.152REF.		0.006REF.		
D	2.450	2.550	0.096	0.100	
E	0.950	1.050	0.037	0.041	
D1	0.350	0.450	0.014	0.018	
E1	0.350	0.450	0.014	0.018	
b	0.150	0.250	0.006	0.010	
е	0.500TYP.		0.020TYP.		
L					

Soledering Footprint





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