

BRES5V0M1B2ZP

Rev.A Jun.-2021

DATA SHEET

/ Descriptions

DFN1006-2L ESD
DFN1006-2L Plastic Package 1-Line,Bi-directional , ESD Protection Diode.

/ Features

Stand-off voltage: $\pm 5V$ Max.
Transient protection for each line according to
IEC61000-4-2(ESD): $\pm 30kV$ (contact)
IEC61000-4-4 (EFT): 80A (5/50ns)
IEC61000-4-5(surge): 20A (8/20 μs)
Ultra-low capacitance: $C_J = 35pF$ typ.
Low leakage current:
Low clamping voltage: $V_{CL} = 7.8V$ typ. @ $I_{PP} = 16A$ (TLP)
Solid-state silicon technology
HF Product

/ Applications

- Battery Line Protection
- Audio Line Protection
- Microphone Line Protection
- GPIO Protection

/ Equivalent Circuit



/ Pinning



/ Marking

See Marking Instructions.

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Definitions of electrical characteristics

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse maximum working voltage	V_{RWM}				± 5.0	V
Reverse leakage current	I_R	$V_{RWM} = 5.0V$			100	nA
Reverse breakdown voltage	V_{BR}	$I_{BR}=1mA$	5.1			V
Reverse holding voltage	V_{HOLD}	$I_{HOLD}=50mA$	5.1			V
Clamping voltage ¹⁾	V_{CL}	$I_{PP}=16A$ $t_p=100ns$		7.8		V
Dynamic resistance ¹⁾	R_{DYN}			0.1		Ω

Clamping voltage ²⁾

/ Electrical Characteristic Curve(Ta=25)



/ Marking Instructions



说明：

5B：为型号代码

Note：

5B：Product Type.

() / Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

- 1

150 180

60 90sec;

1.Preheating:150~180 , Time:60~90sec.
- 2

245 5

5 0.5sec;

2.Peak Temp.:245 5 , D8