

/ Descriptions

DFN1006-2L ESD

DFN1006-2L Plastic Package ESD Protection Diode.

/ Features

1ns

30KV

IEC61000-4-2 4 ESD

AEC-Q101

Ultra small package, Response Time is Typically < 1 ns, ESD > 30 kV per Human Body Model, IEC61000-4-2 Level 4 ESD Protection, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

/ Applications

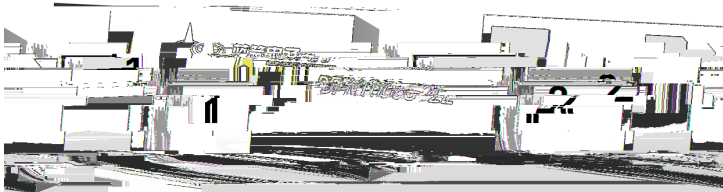
MP3

Suitable for cellular phones audio, MP3 players, Digital cameras, Portable devices, mobile telephone and other users, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



/ Pinning



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Peak pulse power ($t_p = 8/20\mu s$)	P_K	69	W
Peak pulse current ($t_p = 8/20\mu s$)	I_{PP}	5.5	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 30	KV
ESD according to IEC61000-4-2 contact discharge		± 30	
Junction temperature	T_J	150	
Storage temperature	T_{STG}	-55~+150	

/ Electrical Characteristics($T_a=25^\circ C$)

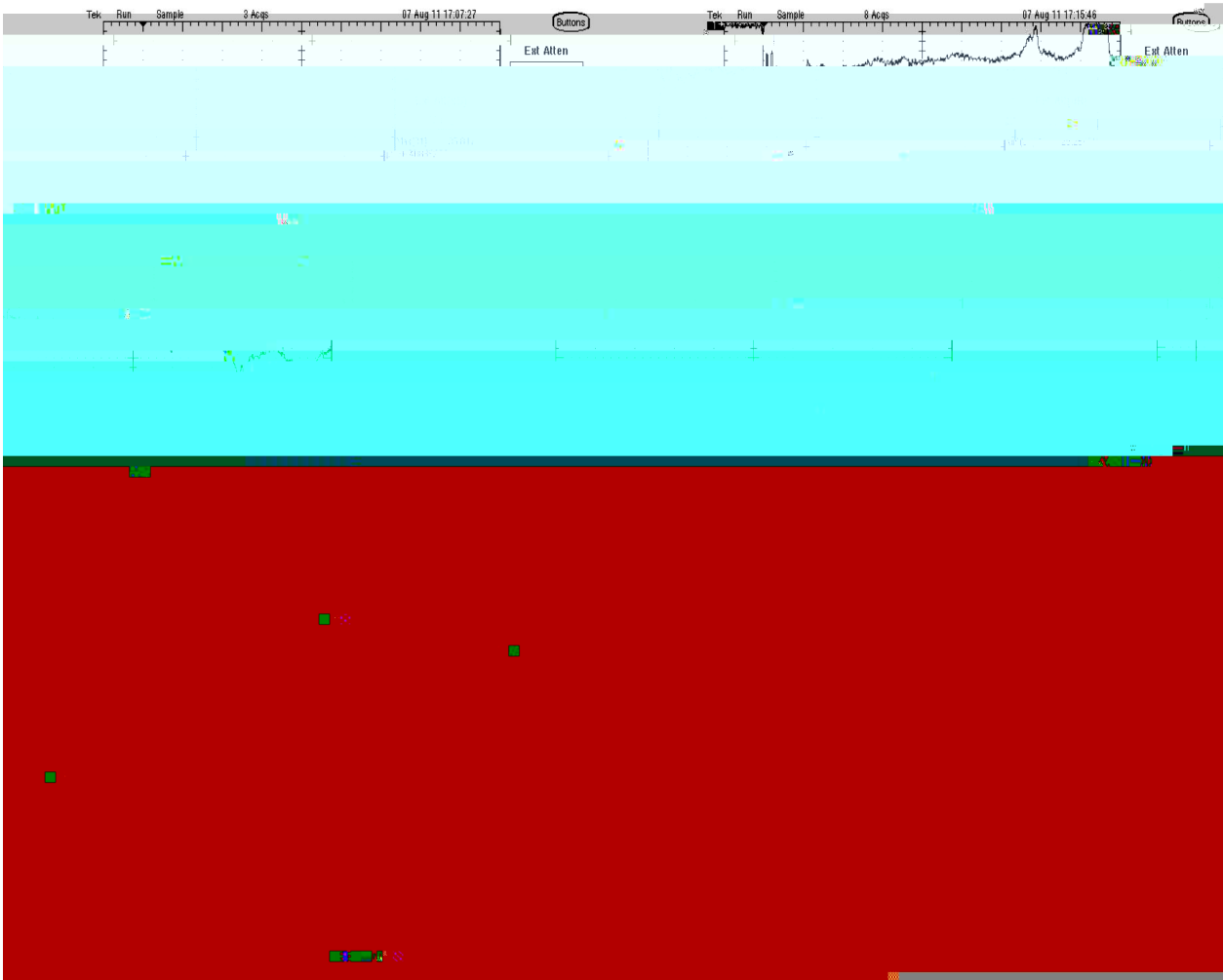
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse maximum working voltage	V_{RWM}				3.3	V
Reverse leakage current	I_R	$V_{RWM} = \pm 3.3V$			± 0.1	μA
Reverse breakdown voltage ¹⁾	V_{BR}	$I_T = 1mA$	5.0		6.8	V
Clamping voltage ²⁾	V_C	$I_{PP} = 1A \quad t_p = 8/20\mu s$			9.8	V
		$I_{PP} = 5.5A \quad t_p = 8/20\mu s$			12.5	V
Junction capacitance	C_J	$V_R = 0V \quad f = 1MHz$			15	pF

Notes:

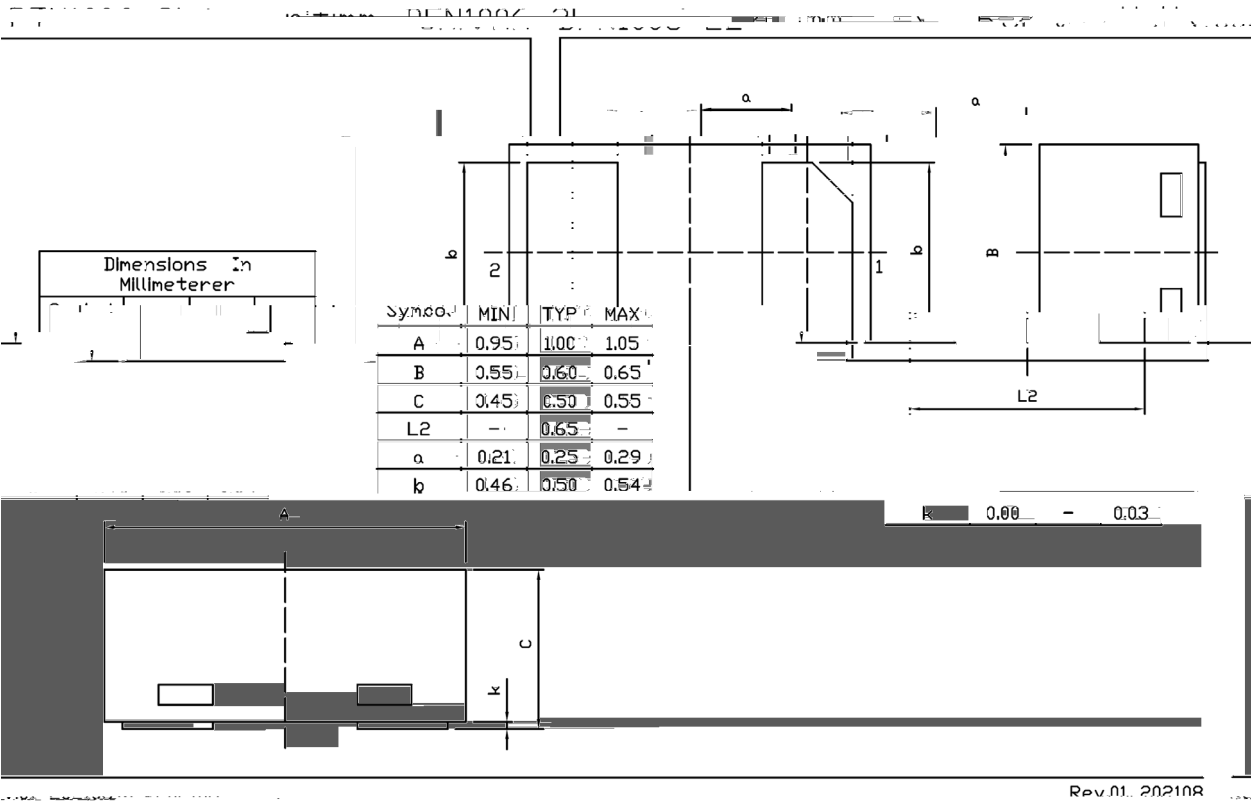
1) V_{BR} is measured with a pulse test current I_T at an ambient temperature of $25^\circ C$.

2) Non-repetitive current pulse, according to IEC61000-4-5.

/ Electrical Characteristic Curve



/ Package Dimensions





/ Marking Instructions



Q

3A

Note

Q

Automobile halogen-free product Code

3A

Product Type

BRES3V3L1B2ZPQ

Rev.A May.-2023



蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET