

/ Descriptions

; =E (' ' - \$) C <J;
DFN1006-2L Plastic Package 1-Line, Uni-directional , ESD Protection Diode.

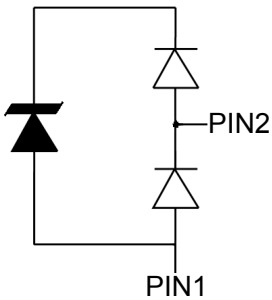
/ Features

(ej)' BM @: - (' ' '\$+\$) + <J;
 8<: \$H(' (
 L d i X j d X c g X Z b X ^ \ # I \ j g f e j \ K ' d \ ' j K y g ` Z X a y < (e j # <J; >)' b M g \ i ? I d X e 9 f [y
 D f [\ d @: - (' ' ' - + -) C \ n \ c + <J; G i f \ K Z k f e # H I X c] \ [k f 8 <: \$ H (' (J k X e [X i [j] f i ? ` ^ _
 I \ c X Y ` c k y # ? = G i f [I Z k %

/ Applications

D G*
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



PIN1 GND PIN2 I/O

/ Pinning



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings

Parameter	Symbol	Rating	Unit
Peak Pulse Power($t_p = 8/20\mu s$)	P_{PK}	56	W
Peak Pulse Current($t_p = 8/20\mu s$)	I_{PP}	4	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 20	KV
ESD according to IEC61000-4-2 contact discharge		± 20	
Junction temperature	T_J	125	
Storage Temperature	T_{STG}	-55~+150	

/ Electrical Characteristics($T_a=25$)

Definitions of electrical characteristics

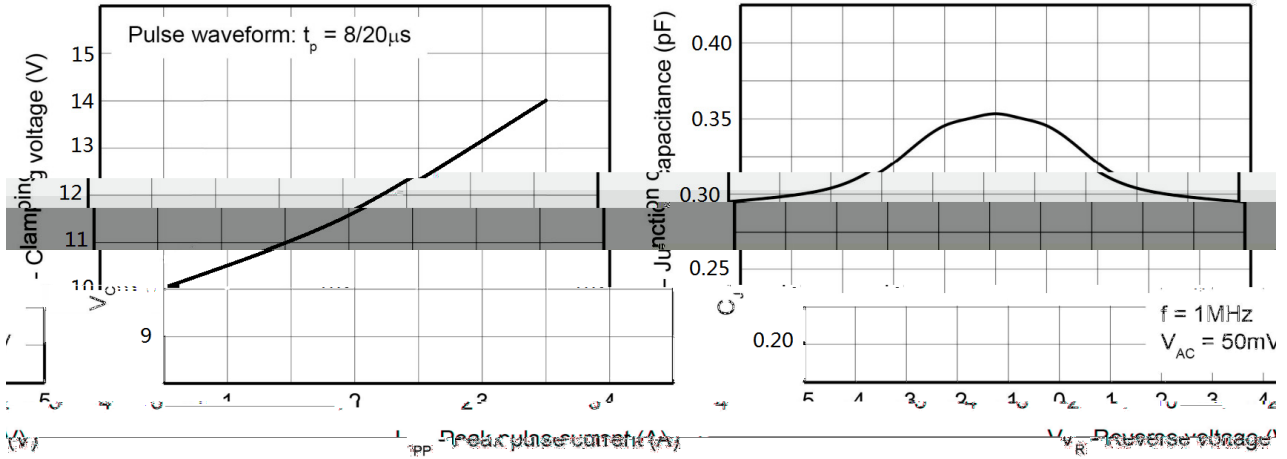
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse maximum working voltage	V_{RWM}				5.0	V
Reverse leakage current	I_R	$V_{RWM} = 5.0V$			100	nA
Reverse breakdown voltage ¹⁾	V_{BR}	$I_T=1mA$	6.0			V
Clamping voltage ²⁾	V_{CL}	$I_{PP} = 1A \quad t_p = 8/20\mu s$			10	V
		$I_{PP} = 4A \quad t_p = 8/20\mu s$			14	V
Junction Capacitance	C_J	$V_R = 0V \quad f = 1MHz$		0.35	0.60	pF

Notes:

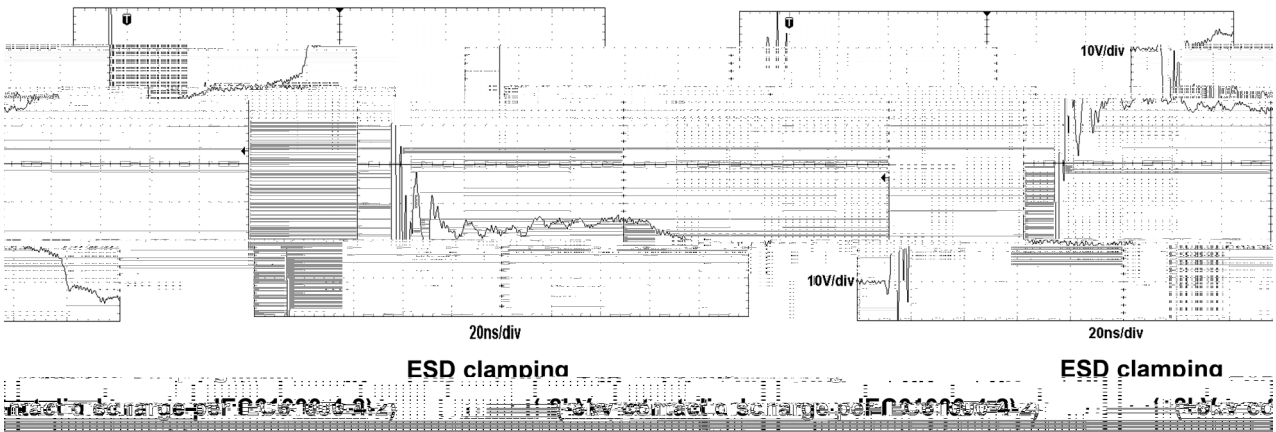
1) V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25 .

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

/ Electrical Characteristic Curve(Ta=25)



Clamping voltage vs. Peak pulse current Capacitance vs. Reverse voltage

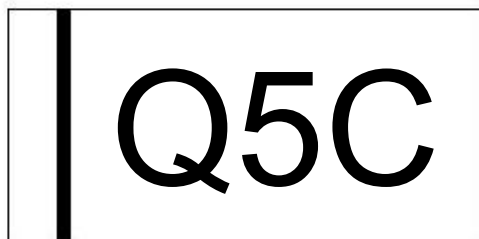


BRES5V0X1U2ZPQ

Rev.A Jan.-2023

DATA SHEET

/ Marking Instructions



Q

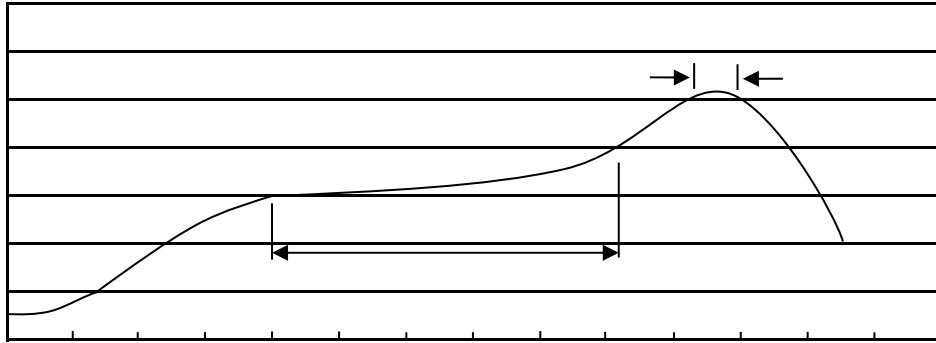
∴

Note

Q Automobile halogen-free product Code

5C Product Type

() /



Note:

- 1 150 200 60 120sec; 1.Preheating:150~200 , Time:60~120sec.
- 2 255±5 5±0.5sec; 2.Peak Temp.:255±5 , Duration:5±0.5sec.
- 3 2 10 /sec. 3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
DFN1006-2L	10,000	10	100,000	6	600,000	7 ×8	180×120×180	390×385×205

/ Notices