/ Descriptions

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

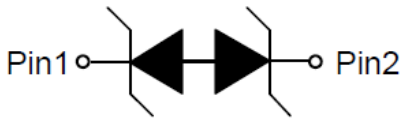
/ Features

Stand-off voltage: ±12V Max
Transient protection for each line according to
IEC61000-4-2(ESD): ±30kV (contact)
IEC61000-4-4 (EFT): 40A (5/50ns)
IEC61000-4-5(surge): 6A (8/20 s)
Ultra-low capacitance: CJ = 5pF typ
Low leakage current:
Low clamping voltage: VCL =21.0V typ. @ IPP = 16A (TLP)
Solid-state silicon technology
Qualified to AEC-Q101 Standards for High Reliability
HF Product

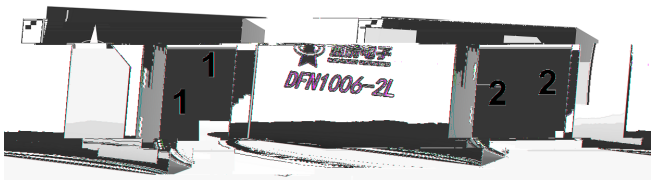
/ Applications

Computers and peripherals
Audio and video equipment
Communication systems
Portable electronics
Meet the stringent requirements of automotive applications

/ Equivalent Circuit



/ Pinning



/ Marking

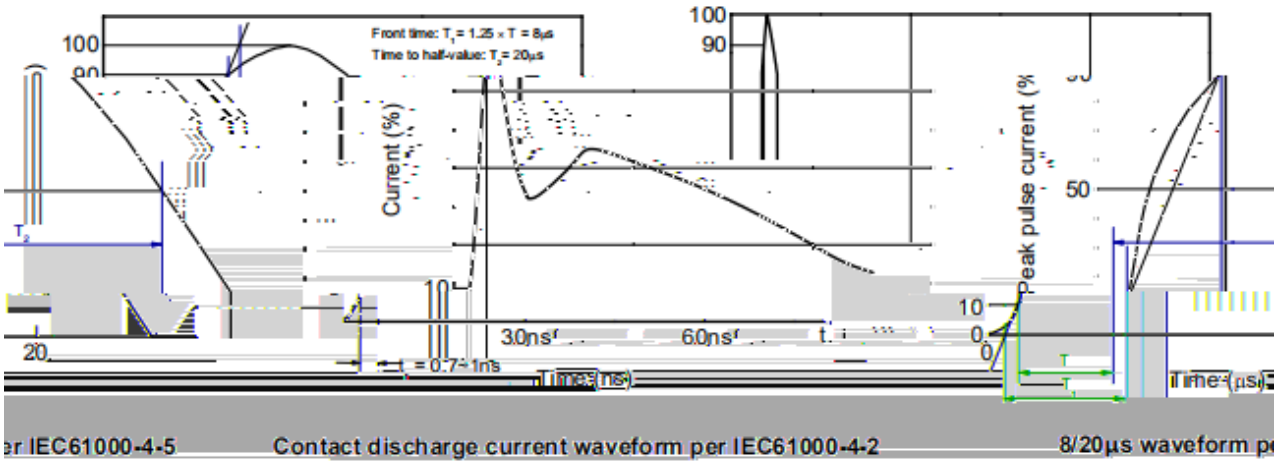
See Marking Instructions.

Parameter	Symbol	Rating	Unit
Peak Pulse Power(t_p = 8/20 s)	P_{PK}	120	W
Peak Pulse Current(t_p = 8/20 s)	I_{PP}	6	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	125	
Operating temperature	T_{OP}	-40~85	
Lead temperature	T_L	260	
Storage Temperature	T_{STG}	-55~+150	

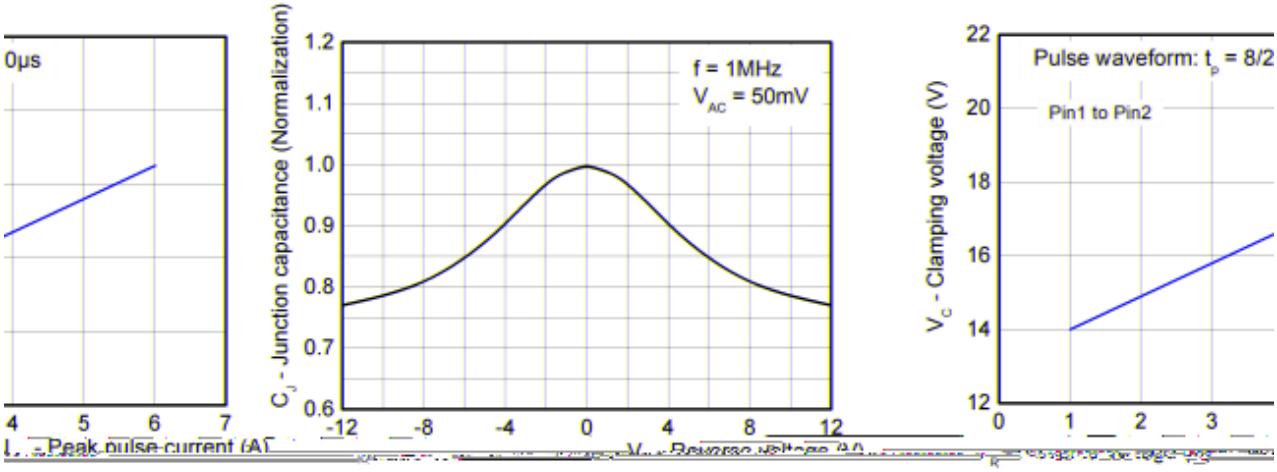
Definitions of electrical characteristics

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse maximum working voltage	V_{RWM}					V

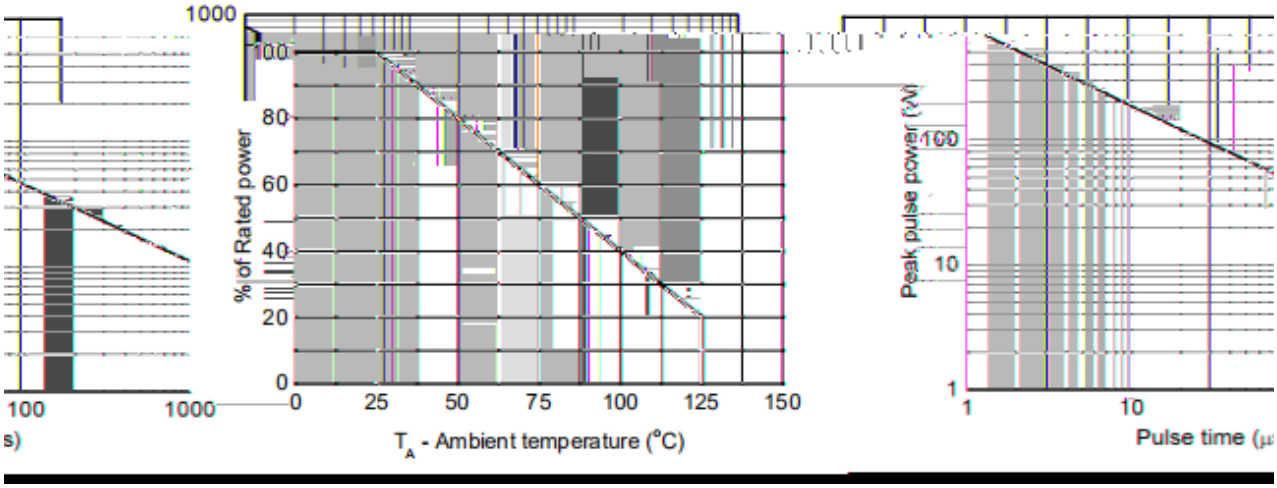
/ Electrical Characteristic Curve(Ta=25)



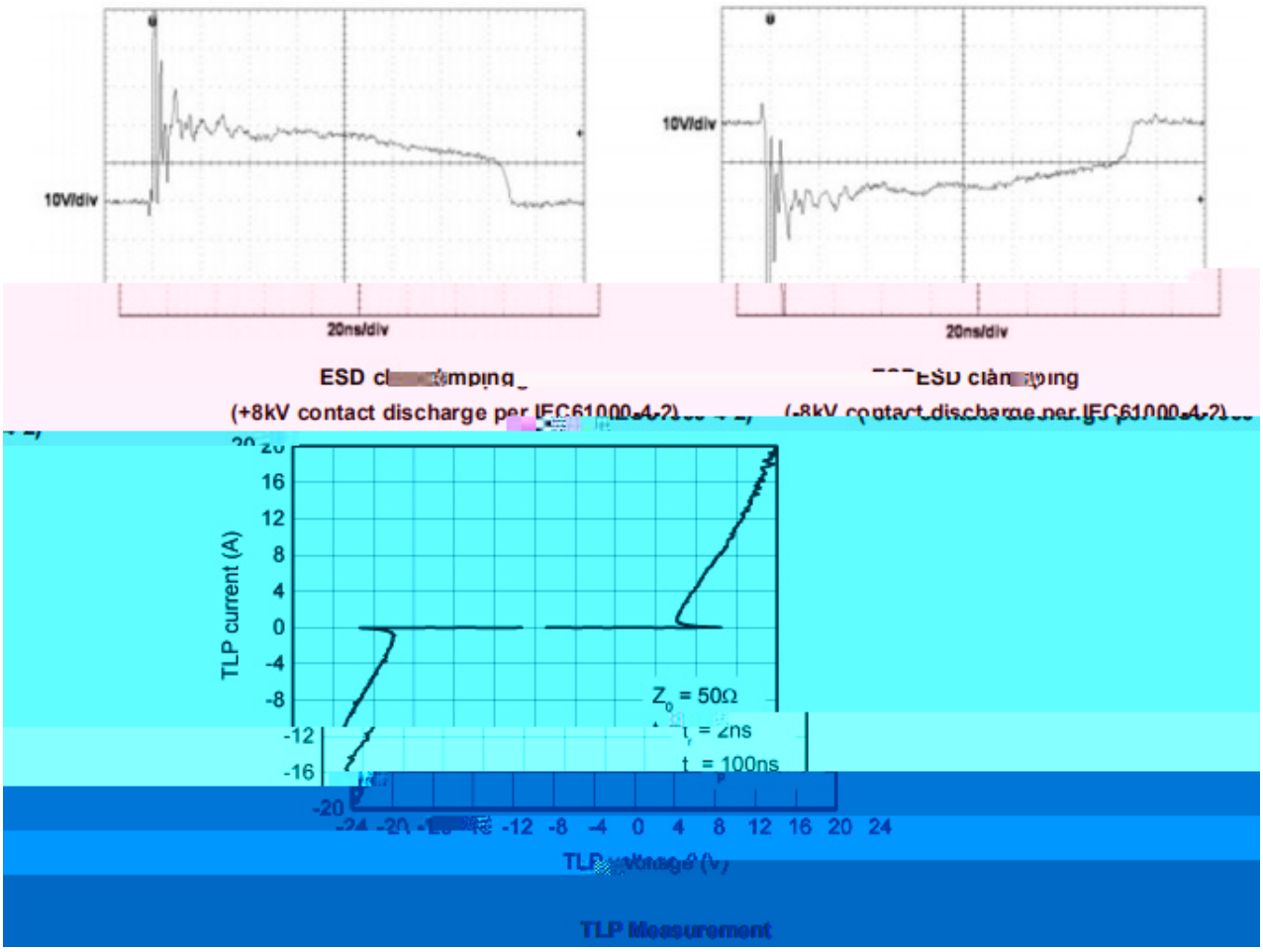
er IEC61000-4-5 Contact discharge current waveform per IEC61000-4-2 8/20μs waveform p



ıge **Clamping voltage vs. Peak pulse current** **Capacitance vs. Reverse volta**

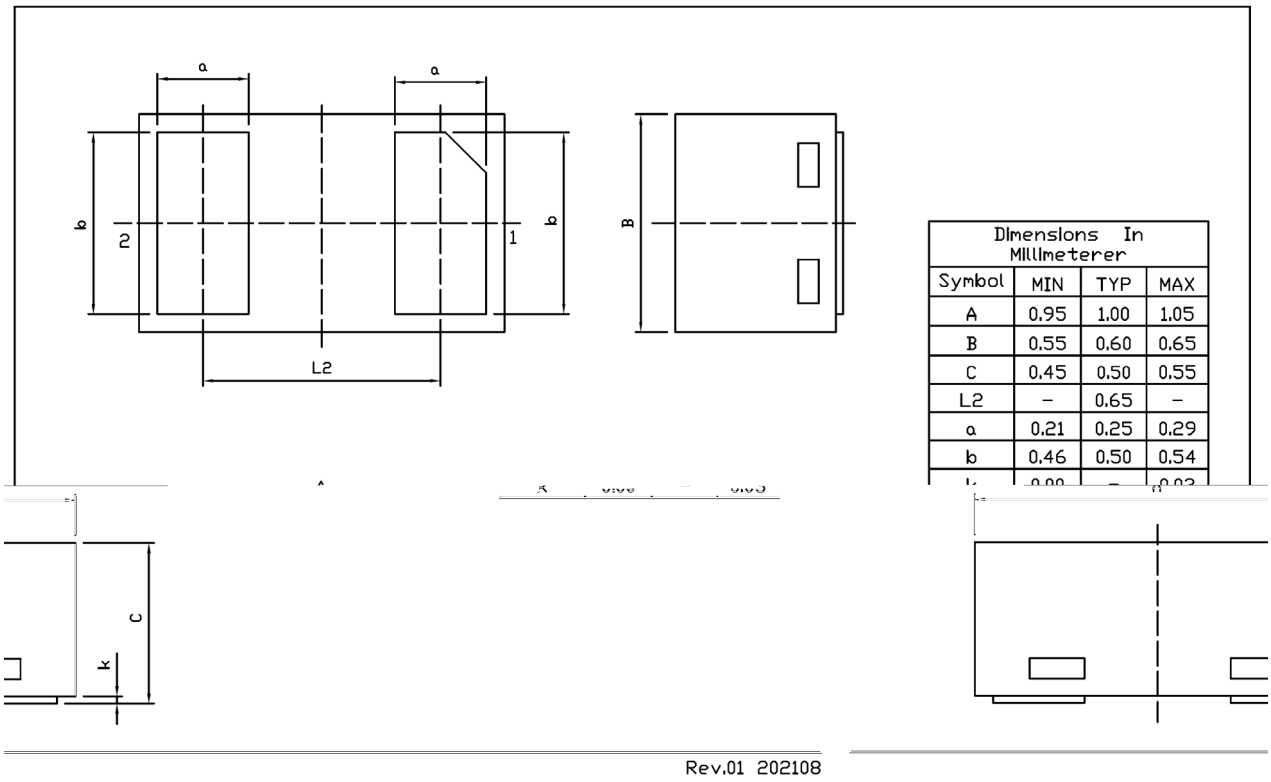


/ Electrical Characteristic Curve(Ta=25)



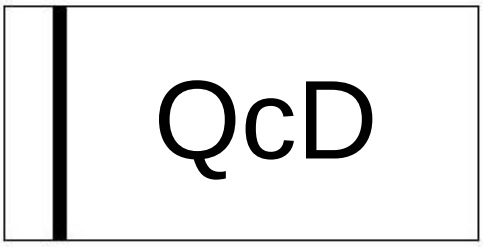
/ Package Dimensions

DFN1006-2L Unit:mm



Dimensions In Millimeterer			
Symbol	MIN	TYP	MAX
A	0.95	1.00	1.05
B	0.55	0.60	0.65
C	0.45	0.50	0.55
L2	–	0.65	–
a	0.21	0.25	0.29
b	0.46	0.50	0.54

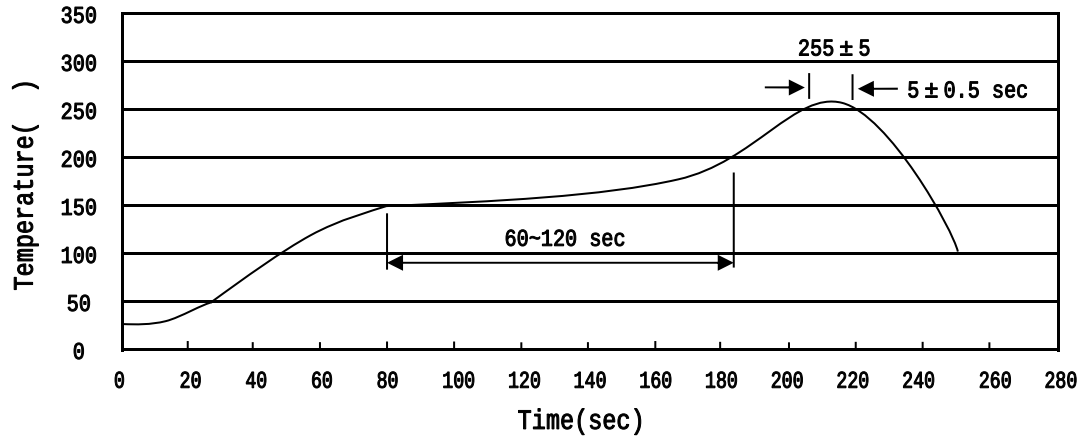
/ Marking Instructions



Note

Q:	Automobile halogen-free product Code
cD	Product Type Code

( ) /



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 封装形式	Units 包装数量					Dimension 包装尺寸 (unit：mm³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
DFN1006-2L	10,000	10	100,000	6	600,000	7 ×8	180×120×180	390×385×205

/ Notices