



FEATURES

ESD protection for high speed data lines to IEC61000-4-2

| ESD contact discharge typical 8KV, max 15KV

| ESD air discharge typical 15KV, max 25KV

Surface mount

| Extremely low capacitance

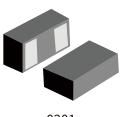
I Very low leakage current

Fast response time

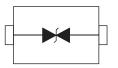
| Bi-directional ESD protection

Lead free solder termination

The best ESD protection for high frequency, low voltage applications



0201



Schematic Symbol

APPLICATIONS

High Definition Multi-Media Interfa	ce (HDMI)
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- | Digital Visual Interface (DVI)
- | Display Port Interface (DP)
- | Unified Display Interface (UDI)
- | Mobile Display Digital Interface (MDDI)
- Gigabit Ethernet
- USB2.0 and USB3.0
- IEEE1394 interface

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003

CAUTION

This component is designed for signal line protection only, Not intended to be used under bias, not for application with a power line.



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
-	Maximum Contact discharge voltage Per IEC61000-4-2	15KV	V
-	Maximum Air discharge voltage Per IEC61000-4-2	25KV	V
T _{OPER}	Maximum Operating temperature	-40 to +90	°C
T _{STG}	Maximum Storage temperature	-55 to +125	°C
T _L	Maximum lead temperature for soldering during 10s	260	°C

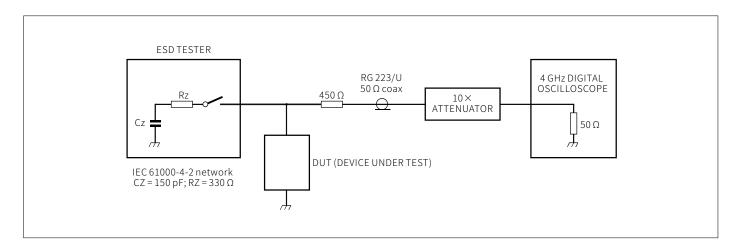
ELECTRICAL CHARACTERISTICS(T_A=25°C)

Symbol	Parameter	Test Conditions	Min.	Тур.	Max.	Unit
V_R	Rated Voltage	-	-	-	15	V
V _T	Trigger Voltage	IEC61000-4-28KV contact discharge	-	300	-	V
V _C	Clamping Voltage	IEC61000-4-28KV contact discharge	-	35	-	V
l _L	Leakage Current	DC 5V shall be applied on component	-	-	0.10	μΑ
C _P	Capacitance	$V_R = 0V, f = 1MHz$	-	0.05	-	pF

Note:

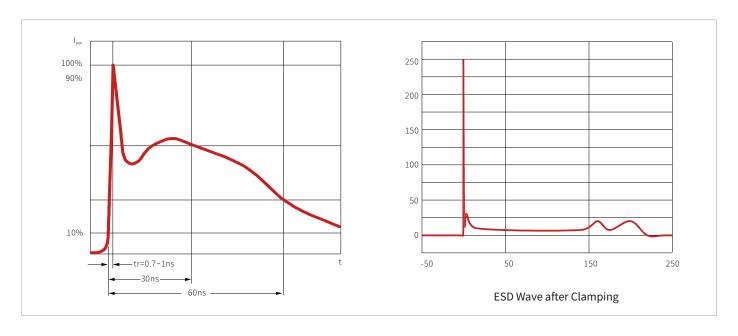
- 1, Trigger and clamping voltage are measured per IEC 61000-4-2, 8KV contact discharge method.
- 2. After reliability tests such as high temp storage, temp cycles, continuous ESD strike etc, the maximum leakage current is less than 10uA.

ESD CLAMPING TEST



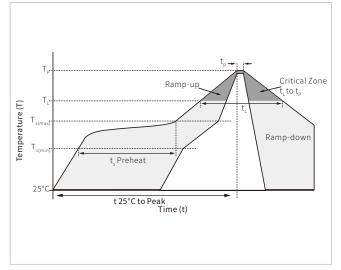


CHARACTERISTIC CURVES



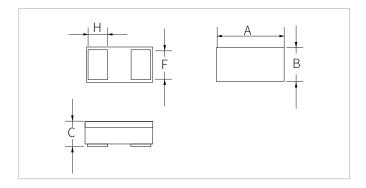
SOLDERING PARAMETERS

	Lead-free assembly	
	Temperature Max $(T_{s(min)})$	150°C
Pre Heat	Temperature Max $(T_{s(max)})$	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ran	np up rate (Liquidus Temp (T_L) to peak	3°C/second max
	T _{s(max)} to T _L - Ramp-up Rate	
Reflow	Temperature (T _L) (Liquidus)	217°C
Kellow	Time (min to max) (t_L)	60 – 150 seconds
Peak Temp	Peak Temperature (T _p) Time within 5°C of actual peak Temperature (t _p) Ramp-down Rate Time 25°C to peak Temperature (T _p)	
Time within		
Ramp-dow		
Time 25°C t		
Do not exceed		260°C



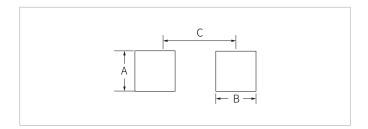


PACKAGE INFORMATION



Ref.		Dimensi	on	
Kei.	Min.	Тур	Max.	Unit
А	0.50	0.60	0.70	
В	0.25	0.30	0.35	
С	0.25	0.30	0.35	mm
Н	0.18	0.20	0.22	
F	0.25	0.27	0.29	

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Dimension	Unit
А	0.30	
В	0.25	mm
С	0.40	

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SAE0201B15UA	0201	10000PCS	7"



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