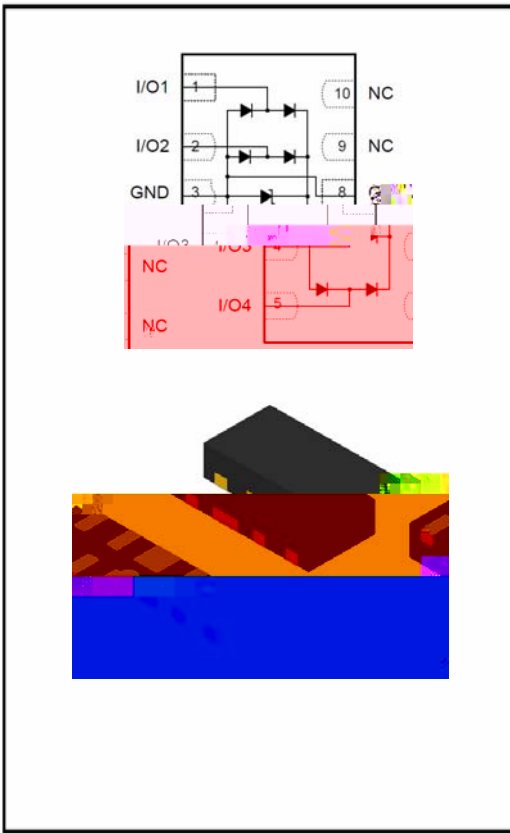


4-Line, Uni-directional, Ultra-low Capacitance, Transient Voltage Suppressor

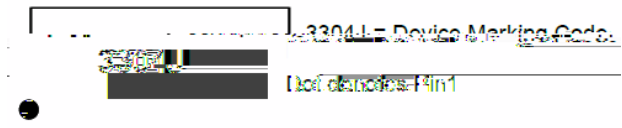


Features

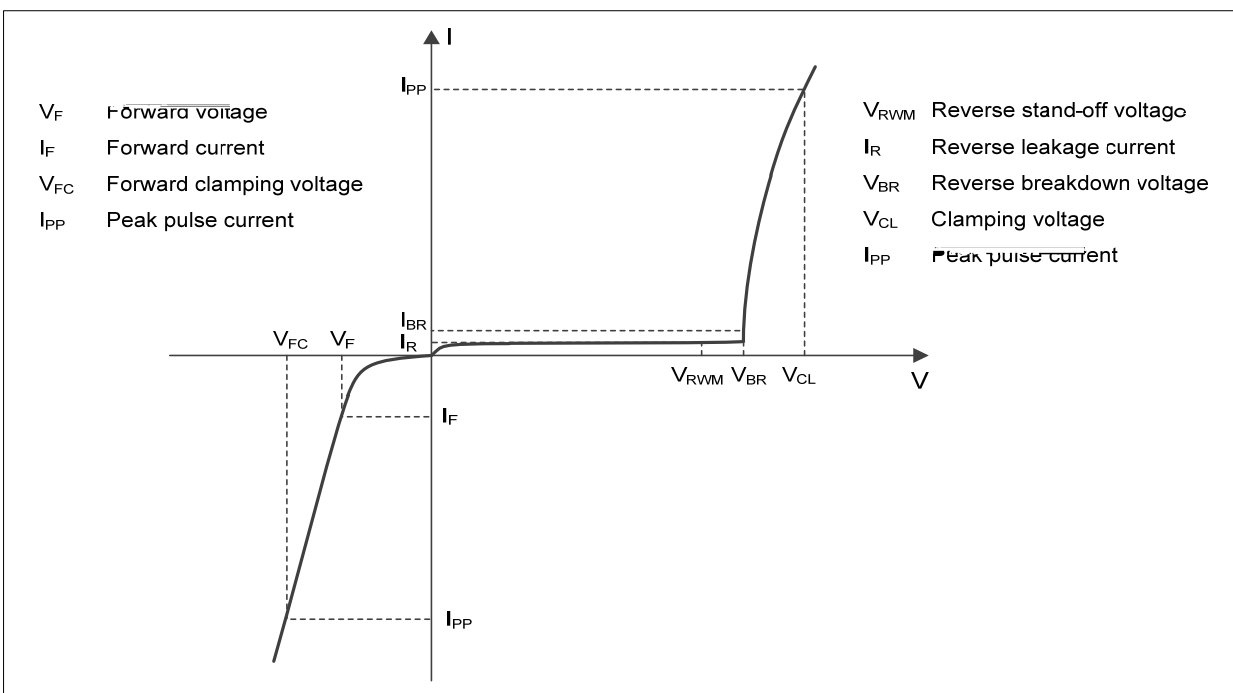
- Operating voltage . 3.3V
- Transient protection for each line according to
 - IEC61000-4-2(ESD) . - 20kV (contact)
 - IEC61000-4-5(surge) . 6A (8/20μs)
- Ultra low leakage
- Low clamping voltage
- Up to 4 lines protects
- RoHS Compliant

Applications

- HDMI1.3 /1.4, USB 2.0/3.0 Type C
- Monitors and flat panel displays
- Set-top box and Digital TV
- MDDI ports
- Video graphics cards
- Digital Video Interface (DVI)
- Notebook Computers
- PCI Express the cathode end



Definitions of electrical characteristics





3304J

Maximum Ratings

PARAMETER	SYMBOL	LIMITS	UNIT
Peak pulse power ($t_p = 8/20\mu s$)	P_{pk}	60	W
Peak pulse current ($t_p = 8/20\mu s$)	I_{pp}	6	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	± 25	KV
ESD according to IEC61000-4-2 contact discharge		± 20	
Junction temperature	T_J	125	$^{\circ}C$
Storage temperature	T_{STG}	-55~150	$^{\circ}C$

Electrical Characteristics $T_a=25$ Unless otherwise specified

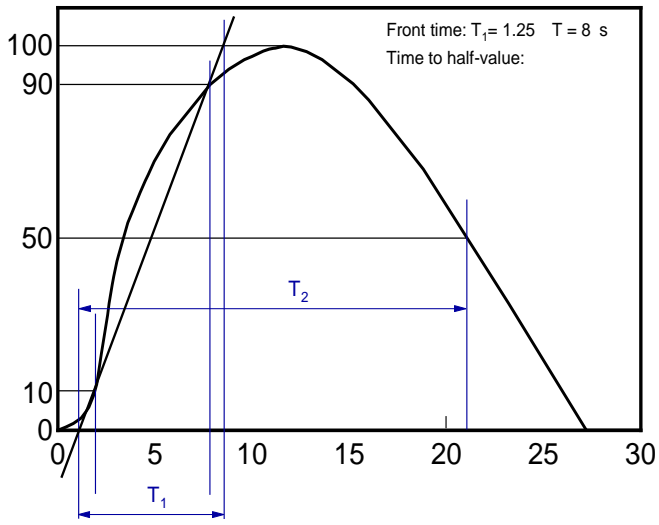
PARAMETER	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse maximum working voltage	V_{RWM}	V	Any I/O pin to ground			3.3
Reverse leakage current	I_R	nA	$V_{RWM} = 3.3V$, any I/O pin to ground			200
Reverse breakdown voltage	$V_{(BR)}$	V	$I_T = 1mA$, any I/O pin to ground	3.5		
Clamping voltage	V_{CL}	V	$I_{PP} = 1A$, $t_p = 8/20\mu s$			7
		V	$I_{PP} = 6A$, $t_p = 8/20\mu s$			10
Junction capacitance	CJ	pF	$V_R = 0V$, $f = 1MHz$ Any I/O pin to GND		0.6	1.0
			$V_R = 0V$, $f = 1MHz$ Between I/O pins		0.4	

Ordering Information (Example)

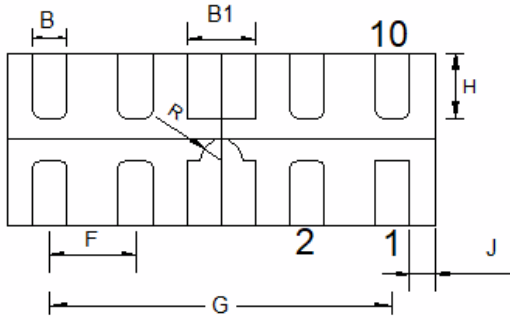
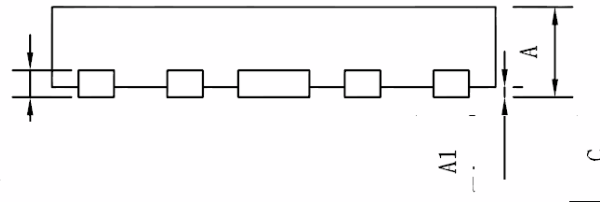
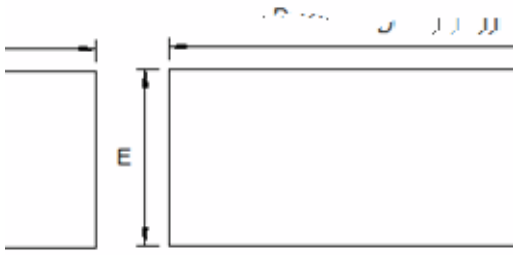
PREFERED P/N	PACKING CODE	UNIT WEIGHT(mg)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
3304J	F1	Approximate 3.48	3000	30000	120000	7 reel

Characteristics (Typical)

Fig.1 8/20 μ s waveform per IEC61000-4-5

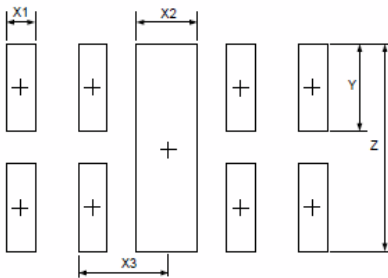


Outline Dimensions



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	0.40	0.45	0.50
A1	--	0.02	0.05
B	0.15	0.20	0.25
B1	0.35	0.40	0.45
C	0.10	0.15	0.20
H	2.15	2.10	2.15
F	0.20	0.20	0.20
G	0.20	0.20	0.20
J	0.20	0.20	0.20

Soldering Footprint



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
X1	0.200	0.008
X2	0.400	0.016
X3	0.600	0.024
Y	0.600	0.024
Z	1.400	0.056

Notes:

This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met.



Disclaimer

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