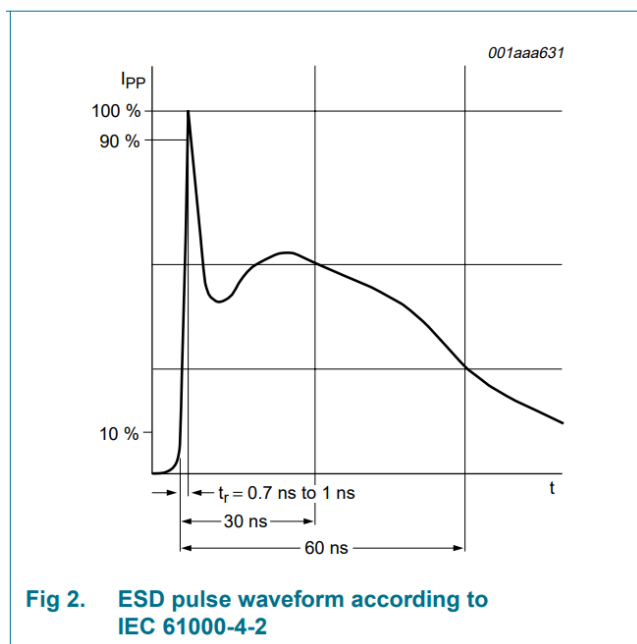


Содержание

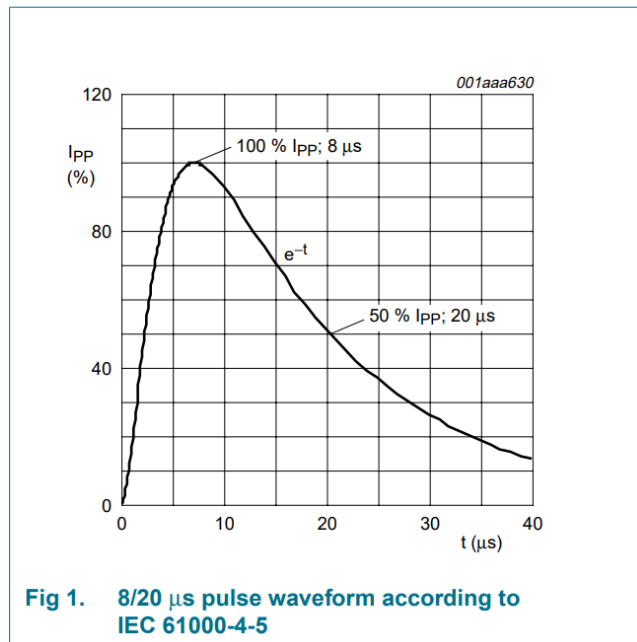
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TVS

basic ESD protection (IEC61000-4-2):



lightning event protection (IEC61000-4-5)



Manufacturers

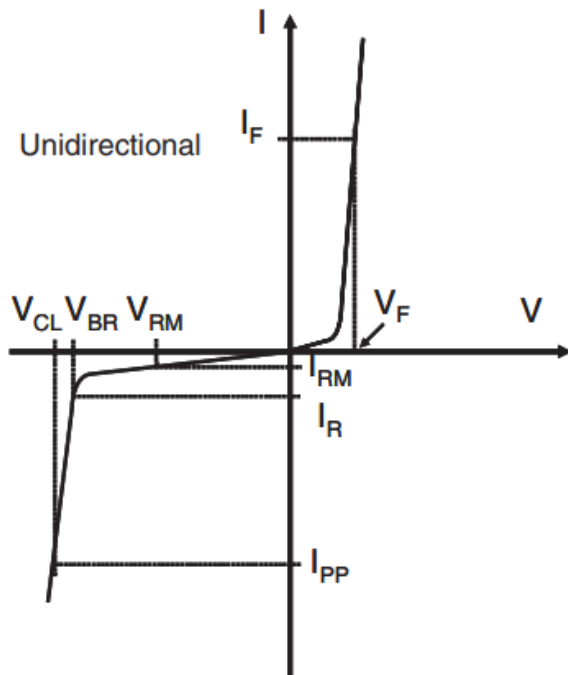
↓ Manufacturer	Country	Description	link	status	Tags
Bourns		Bourns	https://www.bourns.com/	blocked	surge-arrester, inductor, fuse-ptc, diode, diode-tvs

Kyocera AVX			https://www.kyocera-avx.com/		cap, cap-pol, diode, diode-tvs
Littelfuse		Littelfuse	https://www.littelfuse.com/		surge-arrester, fuse-ptc, diode, diode-tvs
Nexperia			https://www.nexperia.com		diode, diode-tvs
Onsemi			https://www.onsemi.com/		diode, diode- schottky, diode- tvs
ST			https://st.com/		diode, diode-tvs
Semtech			https://www.semtech.com		diode, diode-tvs
Texas Instruments	USA	Texas Instruments	https://www.ti.com	blocked	eth-phy, logic, diode, diode-tvs
Topdiode			https://www.topdiode.com/		cap, cap-tant, cap-film, cap- cer, cap-al, trans, trans-npn, trans-pnp, diode, diode-schottky, diode-tvs, diode- bridge, diode- zener, igbt, trans-fet-p, trans-fet-n, trans-fet-n-n, trans-fet-n-p
Vishay			https://www.vishay.com/		diode, diode-tvs, led
szlansemi			http://www.szlansemi.com/		diode, diode-tvs

Unidirectional

Symbol Parameter

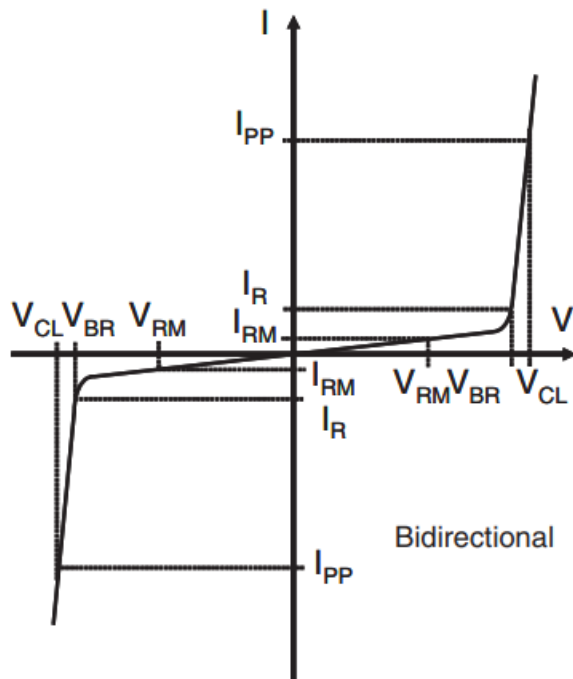
V_{RM}	Stand-off voltage
V_{BR}	Breakdown voltage
V_{CL}	Clamping voltage
I_{RM}	Leakage current @ V_{RM}
I_{PP}	Peak pulse current
αT	Voltage temperature coefficient
V_F	Forward voltage drop
R_D	Dynamic resistance



Bidirectional

Symbol Parameter

V_{RM}	Stand-off voltage
V_{BR}	Breakdown voltage
V_{CL}	Clamping voltage
I_{RM}	Leakage current @ V_{RM}
I_{PP}	Peak pulse current
αT	Voltage temperature coefficient
V_F	Forward voltage drop
R_D	Dynamic resistance



examples

SMAJ58A	SMA	58V	400W	https://sds.compel.ru/item-pdf/db4dae94831278d0992d4e9f4ce1f8dc/pn/yj~smaj100.pdf
ESD03V32D-LC	SOD-323	3.3V		http://www.szlansemi.com/Download/ESDXXV32D-LC.pdf

firefly MB-JD4-RK3568

IF	P\N	Size
USB2	ESD9X5VU	0402
USB3	ESD5311X	0402
USB2,3 5V	ESD5341N\ESD5451N	0402
HDMI HS	ESD5304D	2510 (m)
HDMI misc	ESD5341N	0402
SIM	ESD5451N	0402
DP		
CAN	NO	
GPIO\UART\ADC	ESD5451N	0402
SDCARD data	ESD9X5VU	0402
SDCARD CD	ESD5451N	0402
CSI	NO	
DSI	NO	
RS232	ESD9N12BA	0402
RS485	ESD9N12BA	0402
BUTTON	ESD5451N	0402
5V	AZ5825-01F	0402
12V		
3.3V	AZ5825-01F	0402
1.8V	AZ5825-01F	0402

IF	P\N	Size
MIC\HP	ESD5451N	0402
SPEAKER	ESD9N12BA	0402

ESD9X5VU	0402	USB2, SDCARD data
ESD5311X	0402	USB3 HS (<0.4pF)
ESD5341N	0402	USB2 5V, USB3 5V, HDMI misc
ESD5451N	0402	USB2 5V, SIM, GPIO\UART\ADC, SDCARD CD, BUTTON, MIC\HP
ESD5304D	2510 (m)	HDMI HS (<0.4pF)
ESD9N12BA	0402	RS2323, RS485, SPEAKER
AZ5825-01F	0402	5V, 3.3V, 1.8V

Diodes	DT1140-04LP-7	Will Semiconductor	ESD5304D	Onsemi	ESD7004MUTAG
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P\N	Mfg	Grade	Case	Marking	Cap
USBL6-2SC6Y	ST	Automotive (Y)	SOT23-6L	UL2Y	1pF
USBL6-2SC6Y	Tech Public	Automotive (Y)	SOT23-6L	UL2Y	2.5pF
USBL6-2SC6	ST	Ind	SOT23-6L	UL26	2.5pF
USBL6-2P6	ST	Ind	SOT-666	F	2.5pF