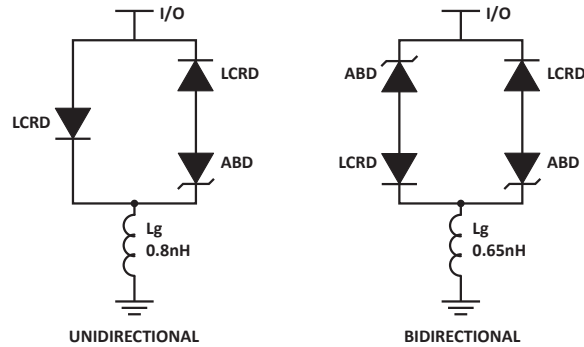


SPICE MODEL & PARAMETERS

**FIGURE 1
SPICE MODEL**



ABD - Avalanche Breakdown Diode (TVS)
LCRD: Low Capacitance Rectifier Diode
Lg - Lead Inductance

TABLE 1 - SPICE PARAMETERS

PARAMETER	UNIT	ABD(TVS)	LCRD
BV	V	See Table 2	200
IBV	μA	1	0.01
C _{jo}	pF	See Table 2	5
I _s	A	See Table 2	1E-13
Vj	V	0.6	0.6
M	-	0.33	0.33
N	-	1	1
R _s	Ohms	See Table 2	0.31
TT	s	1E-8	1E-9
EG	eV	1.11	1.11

TABLE 2 - ABD SPECIFIC SPICE PARAMETERS

PART NUMBER	B _v (VOLTS)	C _{jo} (pF)	I _s (AMPS)	Rs(OHMS)
USB0403	4.5	200	1E-11	0.22
USB0405	6.0	140	1E-11	0.18
USB0408	8.5	67	1E-11	0.12
USB0412	13.3	55	1E-13	1.10
USB0415	16.7	47	1E-13	1.43
USB0424	26.7	28	1E-13	4.24
USB0403C	4.5	200	1E-11	0.22
USB0405C	6.0	140	1E-11	0.18
USB0408C	8.5	67	1E-11	0.12
USB0412C	13.3	55	1E-13	1.10
USB0415C	16.7	47	1E-13	1.43
USB0424C	26.7	28	1E-13	4.24

COMPANY INFORMATION

COMPANY PROFILE

ProTek Devices, based in Tempe, Arizona USA, is a manufacturer of Transient Voltage Suppression (TVS) products designed specifically for the protection of electronic systems from the effects of lightning, Electrostatic Discharge (ESD), Nuclear Electromagnetic Pulse (NEMP), inductive switching and EMI/RFI. With over 25 years of engineering and manufacturing experience, ProTek designs TVS devices that provide application specific protection solutions for all electronic equipment/systems.

ProTek Devices Analog Products Division, also manufactures analog interface, control, RF and power management products.

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