

# Overvoltage Transient Suppressors (Surge Clamping Diodes) Unidirectional (DC) ⚡

ECG Type	Application	Reverse Standoff Voltage VR (Volts)	Breakdown Voltage		Maximum Ratings			Peak Pulse Power (1 msec) PP (Watts)	Fig. No.
					Clamping Voltage Vc (Volts)				
			VBR (Volts)	@ IT (mA)	@ Ipp = 120 A	@ Ipp = 60 A	@ Ipp = 30 A		
ECG4900	Designed to Protect 5.0 V, TTL, DTL and MOS Circuitry	5.0	6.0	1.0	8.5	8.0	7.6	1500	S14

ECG Type	Reverse Standoff Voltage VR (Volts)	Breakdown Voltage				Peak Pulse Current Ipp (Amps)	Maximum Ratings		Peak Pulse Power (1 msec) PP (Watts)	Fig. No.
		VBR (Volts)			@ IT (mA)		Clamping Voltage @ Ipp Vc (Volts)	Temperature Coefficient of VBR (%/°C)		
		Min.	Nom.	Max.						
ECG4902	5.80	6.45	6.8	7.14	10	143	10.5	.057	1500	S14
ECG4918	11.10	12.4	13	13.7	1.0	82.0	18.2	.081	1500	
ECG4926	15.30	17.1	18	18.9	1.0	59.5	25.2	.088	1500	
ECG4928	17.10	19.0	20	21.0	1.0	54.0	27.7	.090	1500	
ECG4934	23.10	25.7	27	28.4	1.0	40.0	37.5	.096	1500	
ECG4950	43.60	48.5	51	53.6	1.0	21.4	70.1	.102	1500	
ECG4958	58.10	64.6	68	71.4	1.0	16.3	92.0	.104	1500	
ECG4988	171.0	190.0	200	210.0	1.0	5.5	274.0	.108	1500	

# Bidirectional (AC) ⚡

ECG Type	Description	Abs. Max. RMS VAC (Volts)	Breakdown Voltage		Peak Pulse Current Ipp (Amps)	Maximum Ratings		Peak Pulse Power (1 msec) PP (Watts)	Fig. No.
			VBR Peak Volts	@ IT (mA)		Clamping Voltage @ Ipp Vc	Temp. Coefficient of VBR (%/°C)		
ECG4901	Designed for Bidirectional Protection of Data Transmission, Digital Controls, Computer Systems, Etc.	3.50	6.0	10	166	9.4	.051	1500	S14
ECG4903		4.00	6.8	10	143	10.5	.057	1500	S14

ECG Type	Abs. Max. RMS VAC (Volts)	Breakdown Voltage				Peak Pulse Current Ipp (Amps)	Maximum Ratings		Peak Pulse Power (1 msec) PP (Watts)	Fig. No.
		VBR Peak Volts			@ IT (mA)		Clamping Voltage @ Ipp Vc (Volts)	Temp. Coefficient of VBR (%/°C)		
		Min.	Nom.	Max.						
ECG4919	7.80	12.4	13	13.7	1	82.0	18.2	.081	1500	S14
ECG4927	10.80	17.1	18	18.9	1	59.5	25.2	.088	1500	S14
ECG4929	12.00	19.0	20	21.0	1	54.0	27.7	.090	1500	S14
ECG4935	16.00	25.7	27	28.4	1	40.0	37.5	.096	1500	S14
ECG4951	30.00	48.5	51	53.6	1	21.4	70.1	.102	1500	S14
ECG4959	41.00	64.6	68	71.4	1	16.3	92.0	.104	1500	S14
ECG4989	121.0	190.0	200	210.0	1	5.5	274.0	.108	1500	S14

Note: A Surge Clamping Diode is normally selected according to the reverse "Stand Off Voltage" (VR) which should be equal to or greater than the DC or continuous peak operating level. Typical response time equals 1 pico second.