

Select the correct Metal Oxide Varistor (MOV) for DC Surge Protection Device (SPD)
for SLP-PV1000 ($U_{CPV} = 1000V_{dc}$, $I_n = 20kA$, $I_{max} = 40kA$)



Connection configuration: Y-configuration for $U_{CPV} = 1000V_{dc}$ (model: SLP-PV1000)

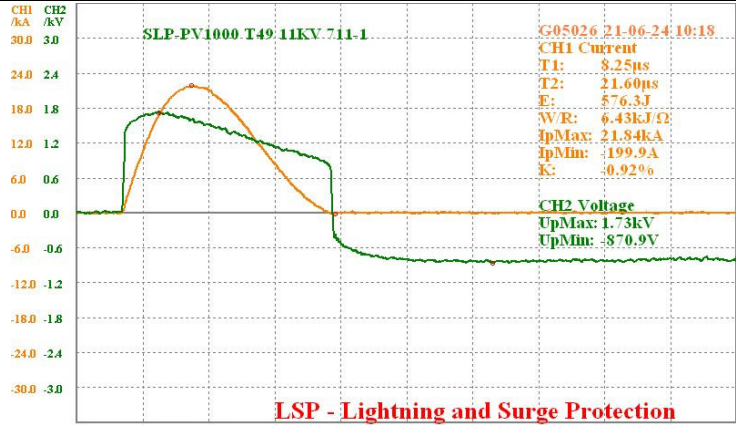
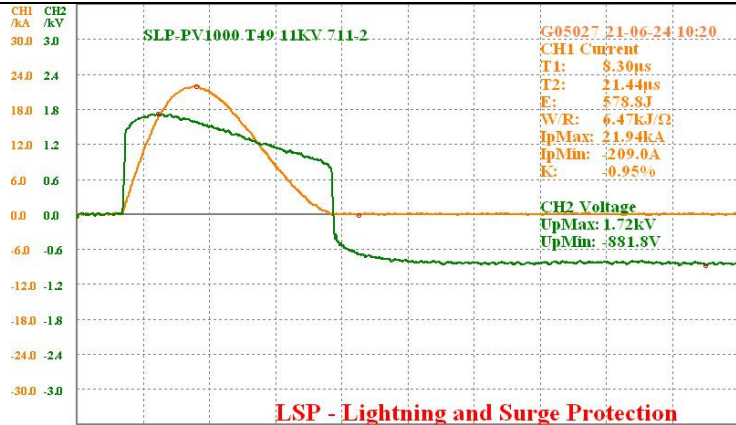
LKD 34S711K Technical Specification

Model Number	Maximum Allowable Voltage		Varistor Voltage		Clamping Voltage (max.)		Rated Voltage	8/20 μ s Peak Current		Maximum Energy (Joule)	Typical Capacitance (Reference)
	AC _{rms} (V)	DC (V)	V1.0mA (V) min.	V1.0mA (V) max.	V_C (V)	I_P (A)		Reference (V)	I_n 10times (kA)		
34S711K	440	585	644	786	1180	300	AC 250	20	50	1280	1950

Select the appropriate voltage varistor by 'Varistor DC parameter tester'

Max. continuous operating voltage U_{CPV} (V) of SPD	Range of varistor voltage (V)	Leakage current (μ A)
$U_{CPV} = 1000V_{dc}$	585V \pm 10%, the value is between 527~644V	<20 μ A

Testing by surge generator - Metal Oxide Varistor MOV for DC PV Solar Type 2 Surge Protection Device SPD SLP-PV1000

Varistor brand	Model & Batches	Group	I_{pMax}	U_{pMax}	Test chart
LKD	34S711K - T49	1	21.84 kA	1.73 kV	 <p>SLP-PV1000 T49 11KV 711-1</p> <p>G05026 21-06-24 10:18</p> <p>CH1 Current</p> <p>T1: 8.25µs T2: 21.60µs E: 576.3J W/R: 6.43kJ/Ω IpMax: 21.84kA IpMin: 199.9A K: 0.92%</p> <p>CH2 Voltage</p> <p>UpMax: 1.73kV UpMin: 870.9V</p> <p>LSP - Lightning and Surge Protection</p> <p>TimeBase:10.00µs/Trigger:Ch1 Ch1: 600kA/Ch2: 600.0V</p>
		2	21.94 kA	1.72 kV	 <p>SLP-PV1000 T49 11KV 711-2</p> <p>G05027 21-06-24 10:20</p> <p>CH1 Current</p> <p>T1: 8.30µs T2: 21.44µs E: 578.8J W/R: 6.47kJ/Ω IpMax: 21.94kA IpMin: 209.0A K: 0.95%</p> <p>CH2 Voltage</p> <p>UpMax: 1.72kV UpMin: 881.5V</p> <p>LSP - Lightning and Surge Protection</p> <p>TimeBase:10.00µs/Trigger:Ch1 Ch1: 600kA/Ch2: 600.0V</p>