

Example 2 Lightning Protection

Protector for telecommunication cables

PLJ-SD1 type



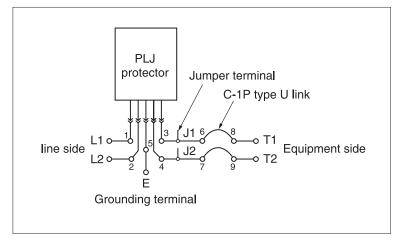
The protector has excellent line cut off function

This is a small type protector, which is excellent in function to protect analog equipments like telephone etc. and digital equipments like modem, DSU etc. Cut off the line, external line return test and monitor test can be done easily,

- Protector plug has the same shape and measurements as those of C-1P. So a through line can be also constructed by U-link.
- By detachment of protector or U link the line can be cut off.
- Wrapping terminal for switching of external line is equipped at the center part of socket. Therefore in case of abnormality on the external line switch to jumper can be done quickly and easily.

PLJ-SD1 type

■Circuit diagram





Specification

Application			Digital exchange, public line, ISDN-line
Transmission performance	Transmission frequency band (Hz)		DC, 16,0.3k ~ 200k
	Operational attenuation (dB)		less than 0.5(600 Ω)
	Allowable max. circuit voltage * 1		DC170V
	Impedance * 2 (Ω)		600/150
	DC resistance (one side of the line) (Ω)		less than 20(25℃)
protection performance to abnormal voltage and current	AC	Line side applied voltage	AC4KV 2 second
		to ground	less than 300V
		between lines	less than 10V
	Impulse	Line side applied voltage	1.2/50 μ s 10kV
		to ground initial max. value * 4	less than 400V
		in operation * 4	less than 40V
		between lines initial max. value *4	less than 25V
		in operation * 4	less than 1 OV
	Current withstanding	AC	AC4A 2 second
		Impulse	8/20 μ s 4kA

- *1 In case that power supply over lapped with the line has no grounding or has grounding at neutral point with high resistance, transmission level becomes 140V, 0.25A and in case that power supply has pendency characteristic, becomes DC220V, 0.25A.
- *2 Possible to use independently of characteristic impedance of the line. However transmission performance shows the measured value at 600 Ω .
- *3 Performance of elastic contact socket (PLJ-TS), in which protector plug is put in, is shown (state without plug).
- *4 Initial max. value means the max. value appeared in the time from the apply of impulse voltage to 10 μs passed. The max. value in operation means the max. value appeared after 10 μs passed and under continuous apply impulse voltage.
- *5 Under the more lower voltage and current than the given values the following current doesn't appear.

SHODEN CORPORATION

Head Office 3-8 Taihei 4-chome, Sumida-ku, Tokyo 130-8543 Japan

e-mail: f@.sdn.co.jp