

## INTRODUCTION

The MPD Series is a modular surge protective device (SPD), featuring an IP65 enclosure rating, and is used for transient overvoltage protection. The MPD Series utilizes thermal protection in conjunction with metal oxide varistors to provide a protection package for use in many applications such as commercial and residential indoor/outdoor LED lighting fixtures. The MPD Series can be connected in series or parallel, is RoHS compliant, and has a LED operational indicator. The MPD Series is available with MCOV of: 120VAC, 277VAC, 347VAC, 480VAC.

### KEY FEATURES

- UL1449 - Type 4CA
- Thermally Protected
- Series/Parallel Connectivity
- Operational indicator
- In: 5kA/10kA I<sub>max</sub>: 10kA/20kA (@ 8/20us)
- IP65 enclosure rating
- 85°C Operating Temperature

### TYPICAL APPLICATIONS

- LED Street Lighting
- Traffic Lighting
- Roadway Lighting
- Parking/Garage Lighting
- Indoor/Outdoor LED Lighting Fixture
- AC Power Systems requiring thermal protection
- Digital Signs



### SAFETY AGENCY APPROVALS

- UL1449
- cUL

### GENERAL SPECIFICATIONS

<b>Operating Voltage Range</b>	120VAC to 480VAC
<b>Rated Continuous RMS Current</b>	7A
<b>Insulation Resistance</b>	> 1,000MΩ
<b>Operating Temperature Range</b>	-40°C to +85°C
<b>Storage Temperature Range</b>	-55°C to +125°C

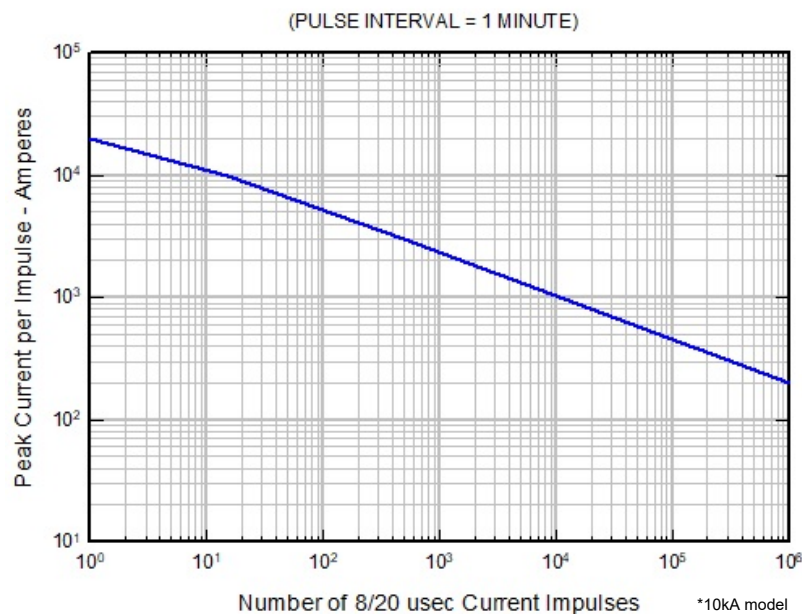
### SAFETY AGENCY APPROVAL

Agency	File Number
UL	E321173
cUL	E321173

## SPECIFICATIONS

Maida Style Number	Maximum Continuous Operating Voltage (MCOV) (VAC)	Peak Current (8 x 20 us)		Voltage Protection Rating (VPR) @ 6kV/3kA	Rated Current	Response Time (ns)	Degree of Enclosure Protection
		$I_n$	$I_{max}$		$I_r$		
		(kA)	(kA)	(V)	(A)		
MPD5K12010KLFFx	120	5	10	L-N: 1280 L-G: 1280 N-G: 1300	7	< 100	IP65
MPD5K27710KLFFx	277	5	10	L-N: 1830 L-G: 1830 N-G: 1840	7	< 100	IP65
MPD5K34710KLFFx	347	5	10	L-N: 2235 L-G: 2235 N-G: 2255	7	< 100	IP65
MPD5K48010KLFFx	480	5	10	L-N: 2810 L-G: 3100 N-G: 3000	7	< 100	IP65
MPD10K12020KLFFx	120	10	20	L-N: 1280 L-G: 1280 N-G: 1300	7	< 100	IP65
MPD10K27720KLFFx	277	10	20	L-N: 1830 L-G: 1830 N-G: 1840	7	< 100	IP65
MPD10K34720KLFFx	347	10	20	L-N: 2235 L-G: 2235 N-G: 2255	7	< 100	IP65
MPD10K48020KLFFx	480	10	20	L-N: 2810 L-G: 3100 N-G: 3000	7	< 100	IP65

PULSE REPETITION RATINGS FOR 8/20usec CURRENT WAVEFORM  
MAXIMUM PEAK CURRENT PER PULSE vs. NUMBER OF IMPULSES

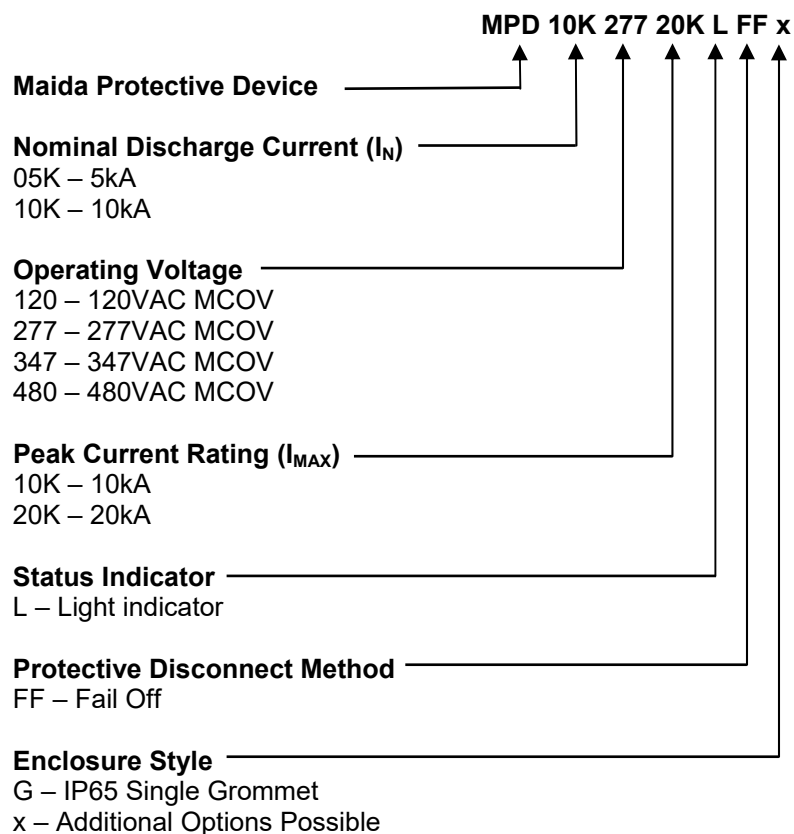




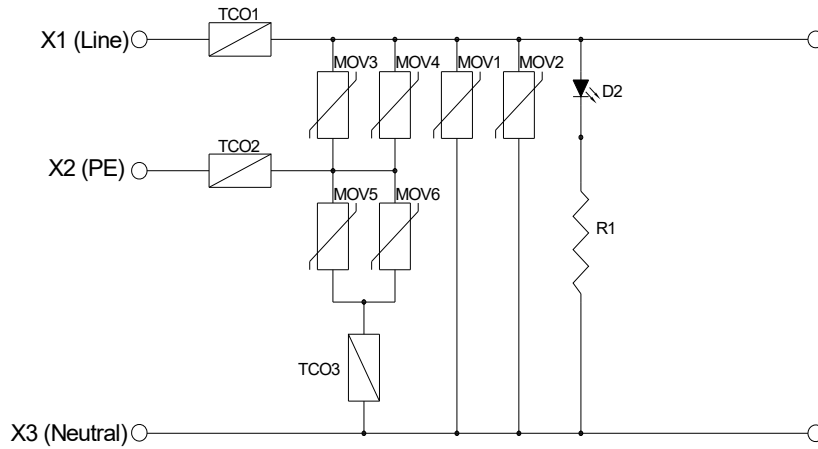
## STYLE DESIGNATION

The Maida Style Number is the typical means to identify our devices when ordered. The style number identifies several parameters that are important for the characteristics of the device. An alternative ordering method, if known, is by our Item Number.

The following example is the standard part numbering system when ordering our MPD Series components by the Maida Style Number:

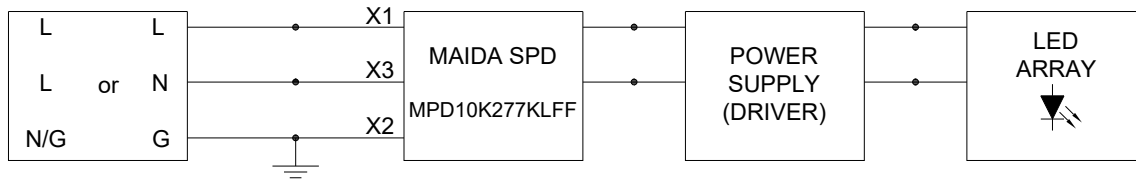


**SCHEMATIC**  
(Patent Pending)

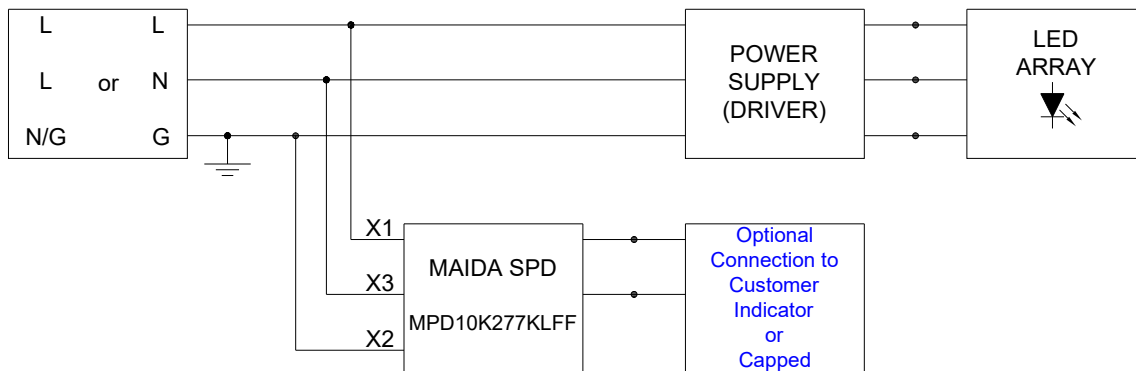


**TYPICAL INSTALLATION**

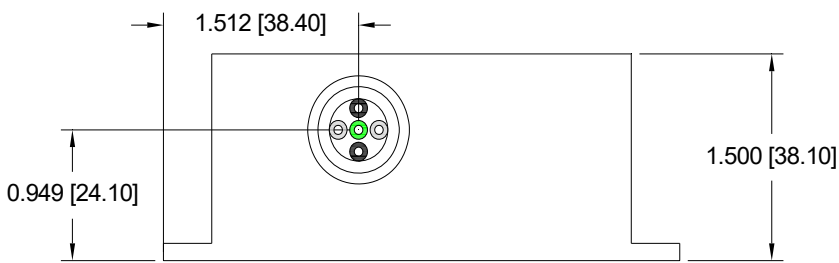
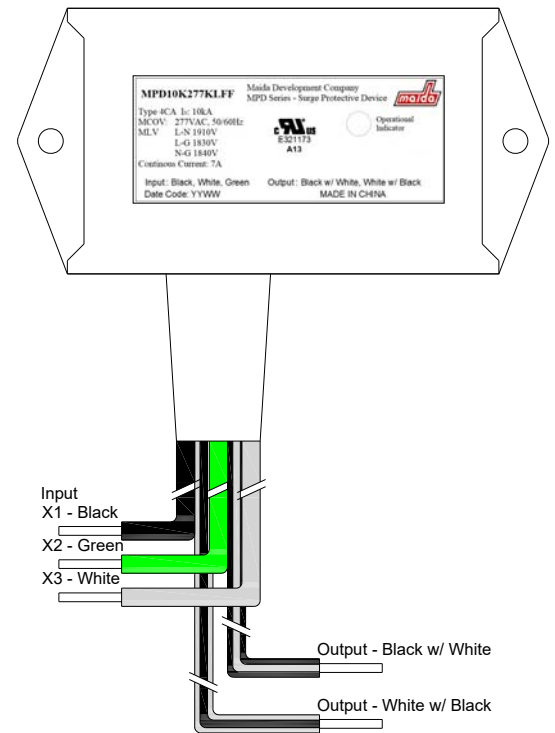
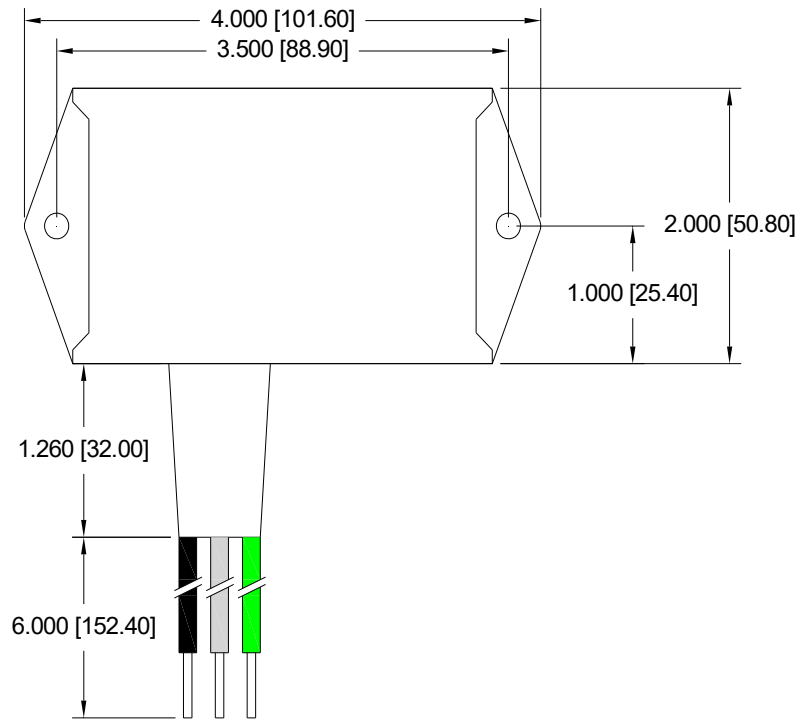
**Series Connection**



**Parallel Connection**



**DIMENSIONS**



Dimensions are in inches [mm]