

# SPECIFICATION

# M50 Connectors

## Materials

Mouldings: High Temperature Plastic UL94V-0  
 Contacts: Copper Alloy  
 Finish: M50-3XX: Gold on contact area, Tin on tails  
 M50-4XX: Gold

## Electrical

Current rating: 1A per contact  
 Voltage rating: 150V AC  
 Voltage proof: 500V AC  
 Contact resistance: 40 mΩ max.  
 Insulation resistance: 1000 MΩ min.

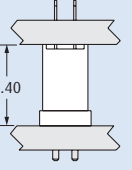
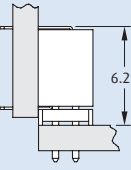
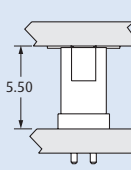
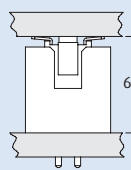
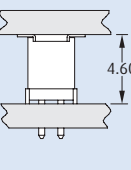
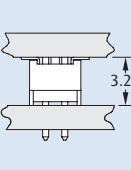
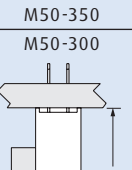
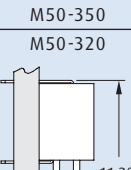
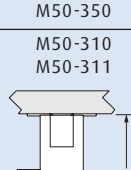
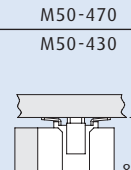
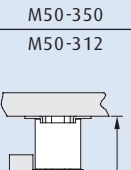
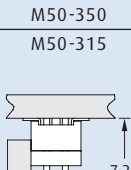
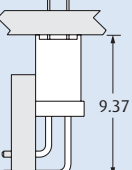
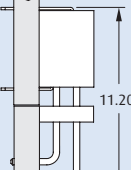
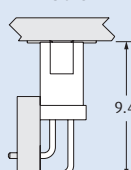
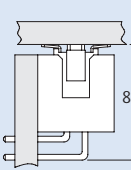
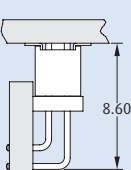
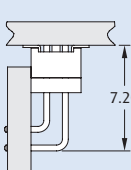
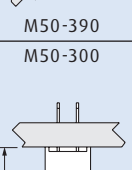
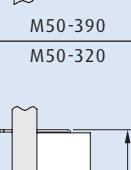
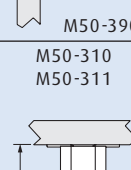
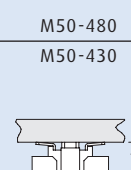
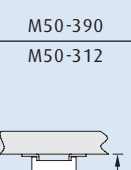
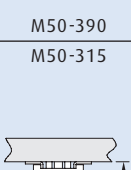
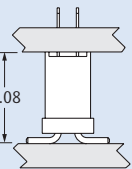
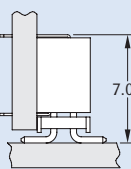
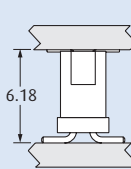
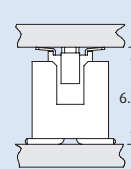
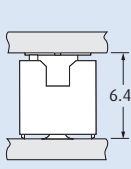
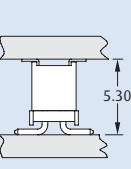
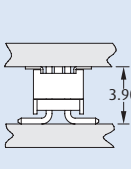

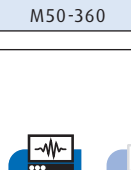
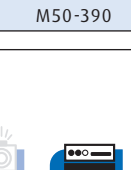

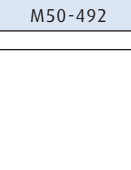
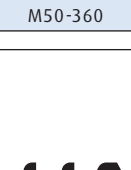
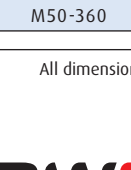
All preferred sizes of this range are held in stock.  
 Check [www.harwin.com](http://www.harwin.com) for availability.

## Environmental

Operating temperature: -40°C to +105°C  
 Solderability: 260°C for 3 seconds  
 Soldering heat resistance: 260°C for 5 seconds

## Mechanical

Durability: M50-315: 600 operations  
 M50-300, 311: 50 operations  
 M50-4XX: 300 operations  
 M50-3XX male: 600 operations  
 Insertion force (max.): M50-3XX: 2.0N per contact  
 M50-4XX: 0.6N per contact  
 Withdrawal force (min.): M50-3XX: 0.3N per contact  
 M50-4XX: 0.1N per contact  
 Vibration sensitivity: 10 – 55Hz, 1.5mm, 6 hours duration  
 Shock severity: 490m/s<sup>2</sup> (50G) for 11 ms

MALE	FEMALE						
	VERTICAL PC TAIL	HORIZONTAL PC TAIL	VERTICAL SMT	VERTICAL SMT Single polarised	VERTICAL SMT Double polarised	VERTICAL SMT Low Profile	
	DIL	DIL	DIL	DIL	DIL	DIL	DIL
VERTICAL PC TAIL	M50-300 	M50-320 	M50-310 M50-311 	M50-430 	Contact technical@harwin.com	M50-312 	M50-315 
	M50-350 	M50-350 	M50-350 	M50-470 		M50-350 	M50-350 
HORIZONTAL PC TAIL	M50-300 	M50-320 	M50-310 M50-311 	M50-430 	Contact technical@harwin.com	M50-312 	M50-315 
M50-390 	M50-390 	M50-390 	M50-480 	M50-390 		M50-390 	
VERTICAL SMT	M50-300 	M50-320 	M50-310 M50-311 	M50-430 	M50-432 	M50-312 	M50-315 
	M50-360 	M50-360 	M50-390 	M50-490 	M50-492 	M50-360 	M50-360 

[www.harwin.com](http://www.harwin.com)

All dimensions in mm.

