

MX47 Series

Robust Compact Waterproof Automotive Connector

Product Information Module

Technology to Inspire Innovation



JAE MX47 Series

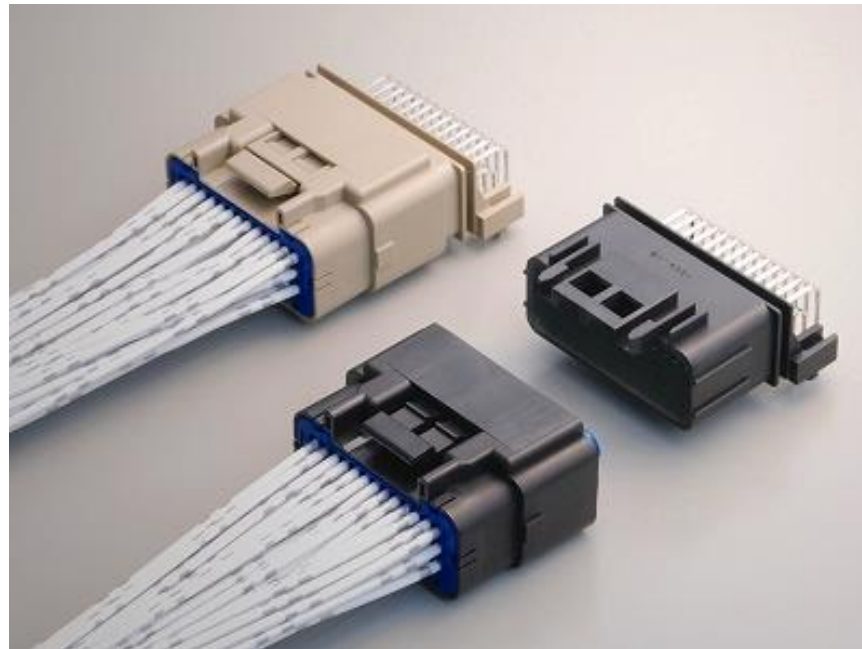
Robust Compact Waterproof Automotive Connector

Application Examples

- Automotives
- Industrial Applications

MX47 Series Overview

The MX47 series is a robust compact, high-density waterproof connector for automotive applications. It is equipped with a guide key for secure mating, and the pin terminals have Pb-free compliant complete plating. Superior vibration resistance makes the connector ideally suited for use in harsh environments such as the engine areas of both 2 and 4 wheeled vehicles.



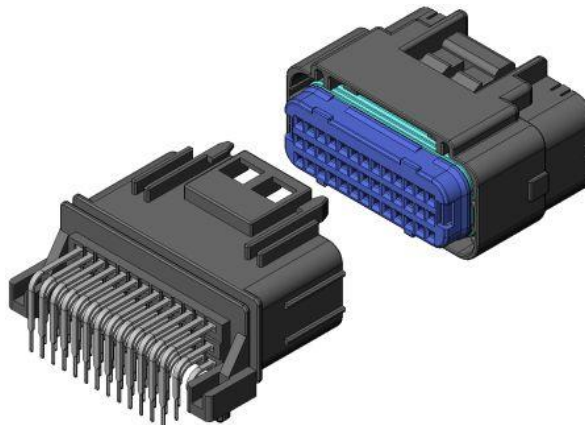
MX47 Series Features

Compact Waterproof Connector, Excellent Performance

- 2.5mm horizontal pitch, 3.6mm vertical pitch, 3 row, board to wire connector
- 39 position, different keying available
- Guide key fore secure mating
- Dowels on both side of the connector for light press-fit to board for temporary holding.
- Socket terminal is a compact box type which is strong against external force.
- Retainer is a simple structure front cap type which is easy to attach.
- Pin terminal press fit structure to prevent leakage of potting material.
- Slim type pin terminal with 0.5mm thickness and 1.0mm width.

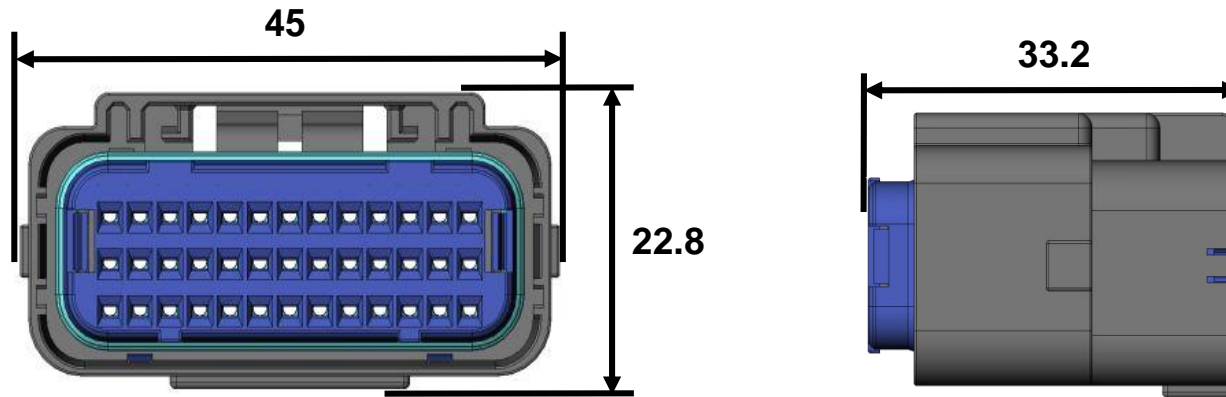
General Specifications

Number of Contacts	39 pos (Different Keying Available)
Contact resistance	5mΩ max (initial) 10mΩ max (after test)
Vibration Resistance	20G (50 to 1000Hz) each pole/ 9hrs
Connector Insertion Force	100 N max.
Operating Temperature Range	-40 to +125°C
Rated Current	3A
Waterproof	98 kPa. Min. (Initial)
Applicable Cable	AVSS 0.3 to 1.25sq

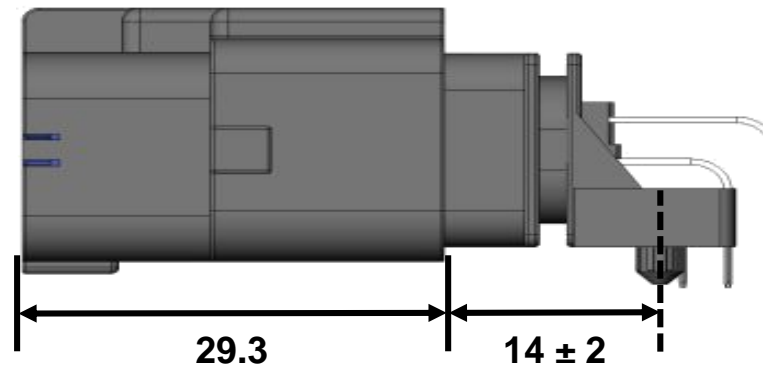


Basic Dimensions

*All units in mm

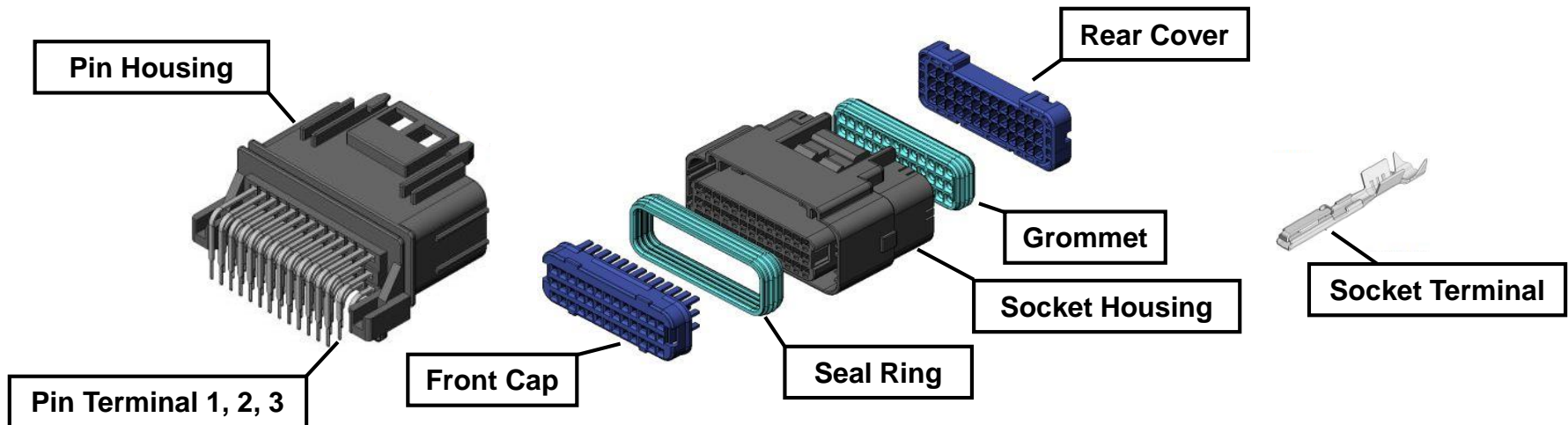


When Mated



Materials and Finishes

Connector	Component	Material / Finish
Pin	Pin Housing	30% GF PBT
	Pin Terminal 1, 2, 3	Copper alloy / Tin plating
Socket	Socket Housing	30% GF PBT
	Seal Ring	Silicone Rubber
	Grommet	Silicone Rubber
	Rear Cover	30% GF PBT
	Front Cap	30% GF PBT
	Socket Terminal	Copper alloy/ Tin plating



Technical Documents and Drawings

Component	Part Number	Drawing No.	Specifications	Handling Instructions
Pin Connector	MX47039NF1	SJ109562	JACS-10621	JAHL-10621
	MX47039NF2	SJ109563		
Socket Connector	MX47039SF1	SJ109556		
	MX47039SF2	SJ109557		
Front Cap	MX47039XF1	SJ109558		
Socket Terminal	M47S65H4FA	SJ109561		
	M47S65H3FA	SJ109560		
	M47S65H2FA	SJ109559		
Dummy Plug	M120-55780	SJ036379		

Component	Part Number	Applicable Wire	Hand Crimp Tool	Semi-Automatic Applicator	Terminal Removal Tool
Socket Terminal	M47S65H4FA	0.3~0.5mm ² , φ1.4~1.6 AVSS 0.3, 0.5 equivalent	CT170-14-MX47	3502-MX47-2	ET-MX47
	M47S65H3FA	0.75~0.85mm ² , φ1.8 AVSS 0.85 equivalent	CT170-14B-MX47		
	M47S65H2FA	1.25mm ² , φ2.1 AVSS 1.25 equivalent	CT170-14C-MX47		

Summary

- A compact, high-density waterproof connector for automotive applications.
- Equipped with a guide key for secure mating
- Superior vibration resistance, ideally suited for harsh environments such as engine areas.
- Socket terminal is a compact box type which is strong against external force
- Pin terminal press fit structure to prevent leakage of potting material



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