

# **MX47 Series**

## **Robust Compact Waterproof Automotive Connector**

Product Information Module

Technology to Inspire Innovation



# **JAE MX47 Series**

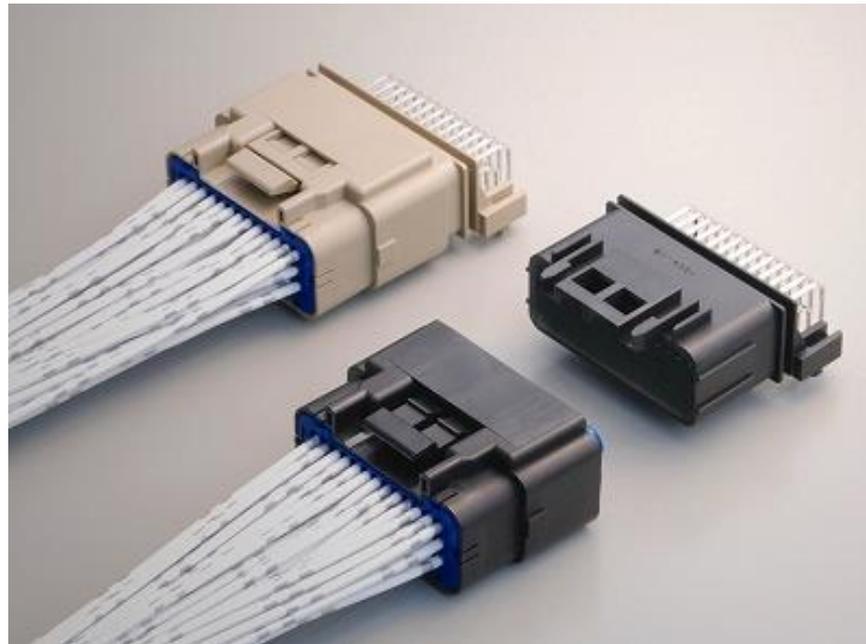
Robust Compact Waterproof Automotive Connector

## **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.



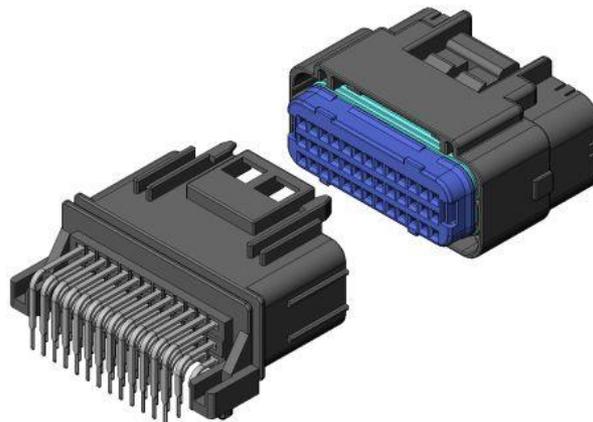
# MX47 Series Features

## 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.

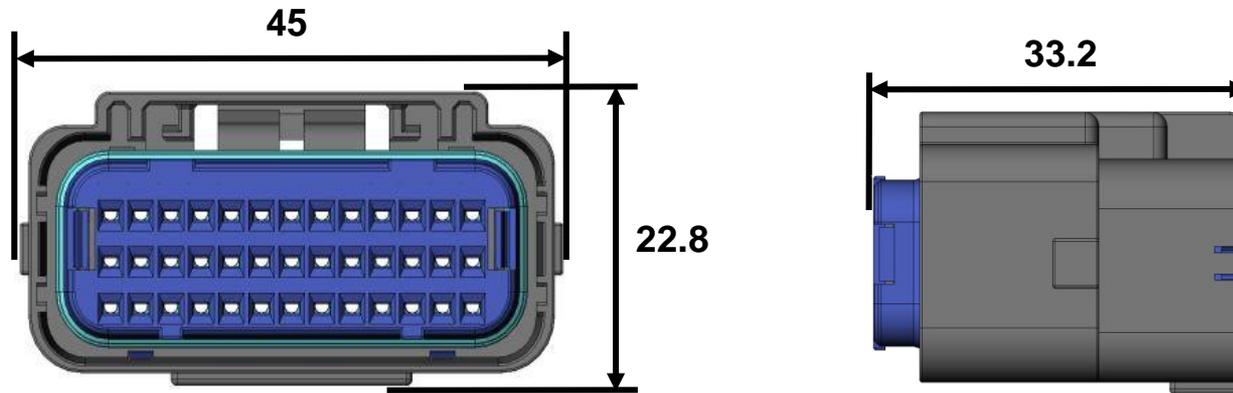
# General Specifications

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

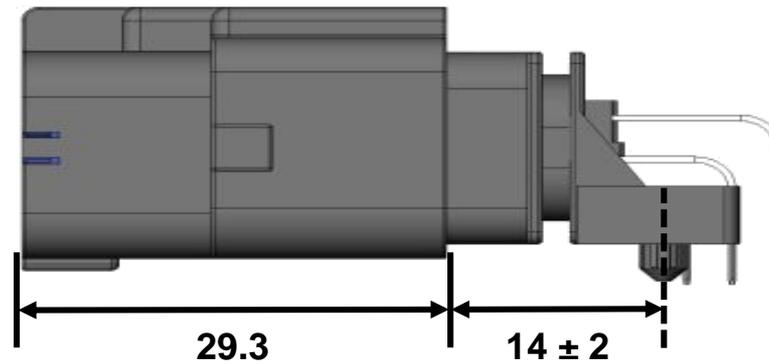


# Basic Dimensions

\*All units in mm

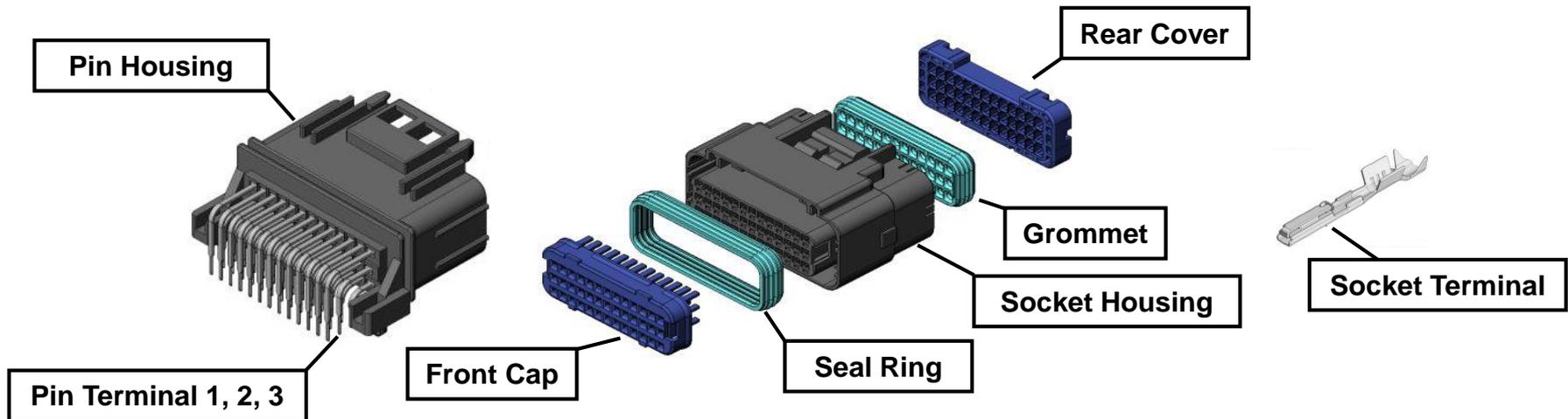


*When Mated*



# 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 <sup>2</sup> , φ1.4~1.6 AVSS 0.3, 0.5 equivalent	CT170-14-MX47	3502-MX47-2	ET-MX47
	M47S65H3FA	0.75~0.85mm <sup>2</sup> , φ1.8 AVSS 0.85 equivalent	CT170-14B-MX47		
	M47S65H2FA	1.25mm <sup>2</sup> , 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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