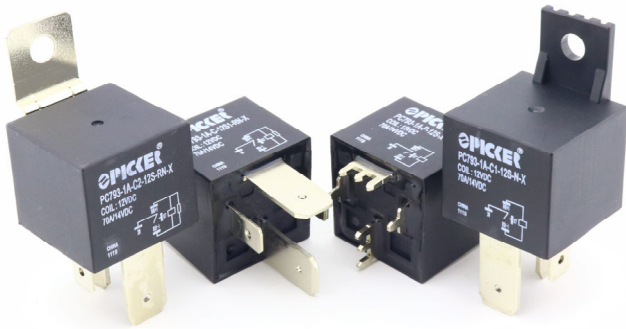


70 Amp Automotive Plug-In / PCB Maxi ISO Relay

PC793#



FEATURES

- Popular Automotive Relay
- 1A Contact Form
- Contact Switching Capacity up to 210 Amps
- 70 Amps @ 14VDC Continuous Carrying Current
- Plain Case, Bracket or PCB Options
- Compatible with Socket SC795
- Lead Free and RoHS Compliant

CONTACT RATINGS 14 VDC at 25°C

Contact Form	1 Form A
	Normally Open
Max Switching Current	Make 210 A
	Break 70 A
Max Continuous Current	70 A @ 25°C
	50 A @ 85°C
Max Switching Power	980 W
Max Switching Voltage	120 VDC
Minimum Load	0.5A @ 12VDC

CONTACT RATINGS 28 VDC at 25°C

Contact Form	1 Form A
	Normally Open
Max Switching Current	Make 90 A
	Break 30 A
Max Continuous Current	30 A @ 25°C
	20 A @ 85°C
Max Switching Power	840 W
Max Switching Voltage	120 VDC
Minimum Load	0.5A @ 12VDC

CHARACTERISTICS

Operate Time	10 msec Typical
Release Time	10 msec Typical
Insulation Resistance	100 MΩ min @ 500VDC
Dielectric Strength	50/60 Hz 500V _{RMS} 1 min. Between Contact and Coil
	50/60 Hz 500V _{RMS} 1 min. Between Contacts
Shock Resistance	294 m/s ²
Vibration Resistance	10 - 22.3 Hz Double Amplitude, 10mm
	22.3 - 500 Hz 98m/s ²
Terminal Strength	10 N, 100 N (Push and Pull)
Solderability	260°C for 5 seconds
Power Consumption	1.6 W
Relative Humidity	85% at 40°C

CROSS REFERENCES

TE: F7 & F7A
Example: V23136-J004-X103 crosses to PC793-1A-12C-R-X
Example: V23136-J0053-D642 crosses to PC793-1A-24C-X
Song Chuan: 897
Example: 897-1AH-S-12VDC crosses to PC793-1A-12S-X
Example: 897-1AH-S-R1-001-24VDC crosses to PC793-1A-24S-DR-X
Example: 897P-1AH-C-R1-12VDC crosses to PC793-1A-24S1-R-X

CHARACTERISTICS CONTINUED

Operating Temperature	-40°C to +125°C
Storage Temperature	-40°C to +155°C
Weight	38 grams

ORDERING INFORMATION

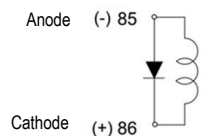
Example:	PC793	-1C	-C	-12	S	-D	-X
Model:	PC793						
Contact Form:	1A						
Case Style:	C: Plug-In; C1: Plastic Bracket; C2: Metal Bracket; C3⁽²⁾: Weatherproof Shrouded Cover w/ Metal Bracket; P: PCB						
Coil Voltage:	6, 12, 24						
Enclosure:	C: Dust Cover, S: Sealed, S1: Flux Tight ⁽³⁾						
Coil Power:	Nil: 1.6W						
Parallel Component:	Nil: None; D: Diode; R: Resistor; 2D: Two Diodes; DR: Diode and Resistor						
Terminal Plating	N: Nickel Plated Terminals Standard on all Plug in Models; Nil: PC Pin Version						
RoHS Compliant:	-X						

See SC795 for available sockets

Coil Options

Resistor Values:
12V - 680 ohm
24V - 2,700 ohm
Diode: 1N4005

Orientation of Optional Diode



⁽²⁾ Weatherproof shrouded cover in development. Projected for 4Q 2020.

⁽³⁾ Flux Tight relays are constructed such that Flux will not enter the relay in an automated soldering process, they are NOT Suitable for water wash

Box Quantity: 400; Inner Box: 100

COIL DATA

Coil Voltage (VDC)		Must Operate Voltage Max (VDC)	Must Release Voltage Min (VDC)	Resistor Values (Ohms ± 10%)	Coil Resistance Without Resistor (Ohms ± 10%)	Coil Resistance With Resistor (Ohms ± 10%)	Rated Current Without Resistor @ 12 VDC (mA)	Rated Current With Resistor @ 12 VDC (mA)
Rated	Max				1.6 W	1.8 W	1.6 W	1.8 W
12	15.6	7.8	1.2	680	90	80	133	150
24	31.2	15.6	2.4	2700	360	320	67	75

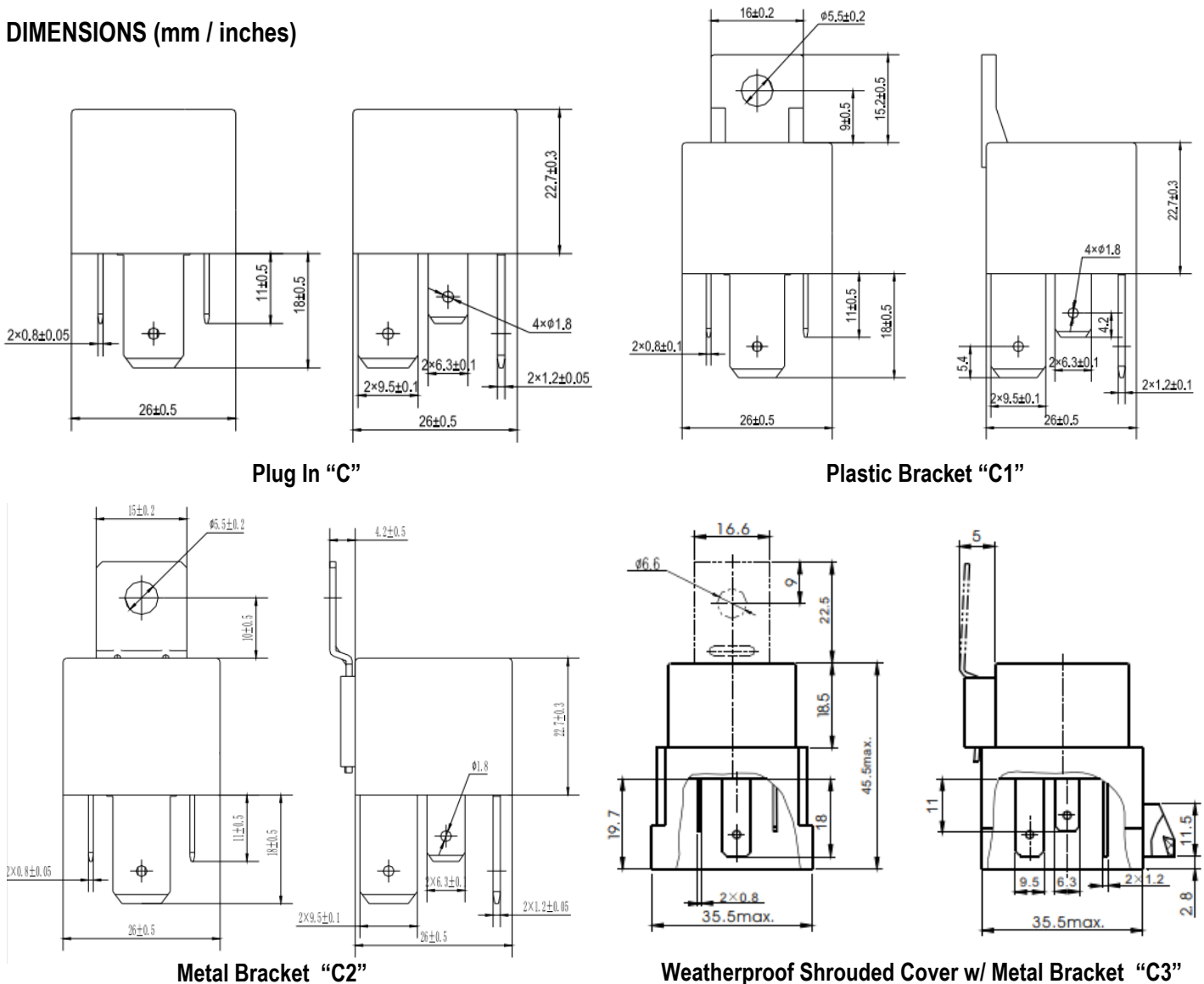
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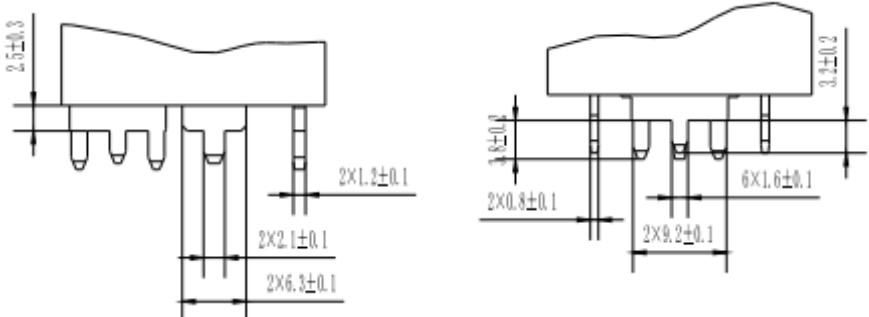
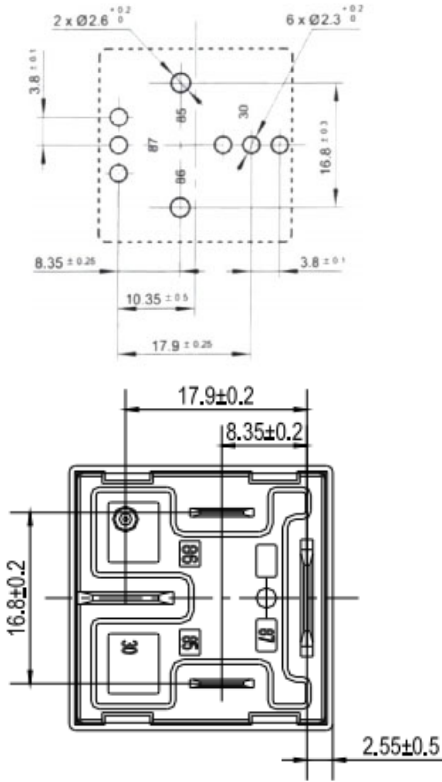
- The use of any coil voltage less than the rated voltage will compromise the operation of the relays.

CONTACT DATA

Material	AgSnO Alloy	
Initial Contact Resistance	≤ 30mΩ initial	
Max Contact Voltage Drop	≤ 50 mV at 10A	
Service Life	Electrical	1 x 10 ⁶ Operations
	Mechanical	1 x 10 ⁷ Operations

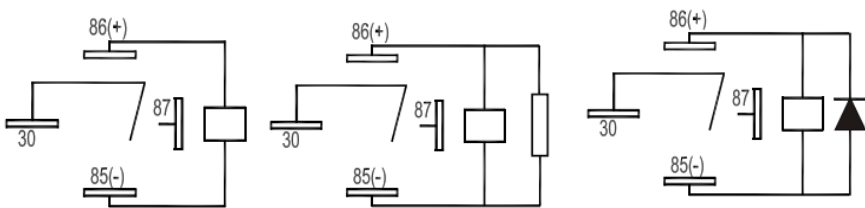
DIMENSIONS (mm / inches)





PC Pins "P"

Wiring Diagrams



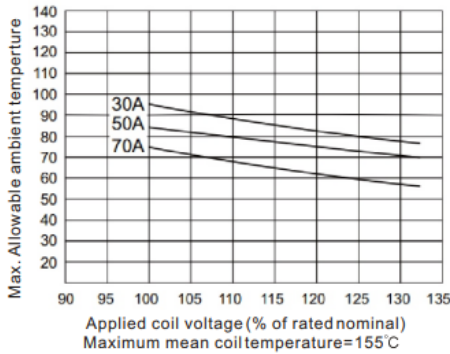
Without Resistor

With Resistor

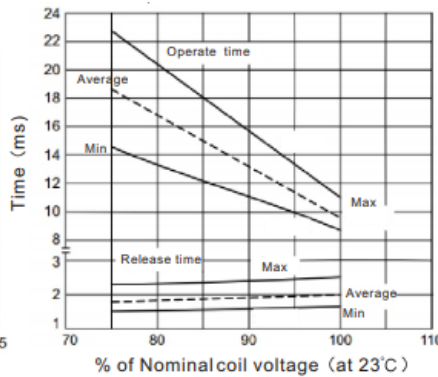
With Diode

Bottom View

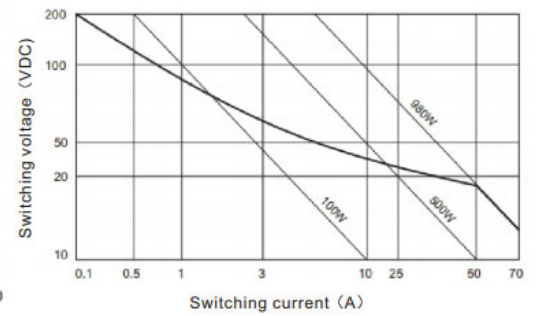
Coil Temperature Rise



Operate/Release Time



Max Value for Switching Capacity



Life Expectancy

