www.DataSheet4U.com

O/E/N 3572

AUTOMOTIVE POWER RELAY

FEATURES

- Direct PCB Mountable
- High Performance
- Suitable for various loads
- Heavy Duty
- Immersion Cleanable Version available

APPLICATION

- Direction Indicators
- Air-Conditioning Systems
- Boby Controllers
- Head Lamp Control
- Ventilation Motors
- Security Systems

TECHNICAL DATA FOR CONTACT SIDE

AREAS OF APPLICATION		RESISTIVE / INDUCTIVE LOADS	INDICATOR LAMP LOADS**
Contact Configuration	:	1A/1C	1A
Contact Material	:	Silver Nickel	Palladium Copper* / Silver Nickel
Contact Rating at 23°C - 12 VDC	:	45 / 30 A	12 A
24 VDC	:	20 / 10 A	
Electrical Life Operations Min.	:	2×10^5	5×10^5
Mechanical Life Operations Min.	:	1×10^7	1×10^7
Contact Voltage Drop at 10 A (Min)	:	30mV	50mV
Maximum Switching Current @ 12.8 VDC For 3 Sec.	:	100A	100A

*The moving contact (Pdcu) must be connected to positive potential

**Under in troduction

www.DataSheet4U.com

GENERAL DATA FOR COIL SIDE

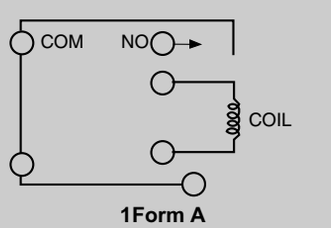
Nominal Coil Power	:	1.6W (Approx)
Operating Power	:	0.9W (Approx)
Operate Time**	:	5 milli Seconds
Release Time**	:	3 milli Seconds

** At nominal voltage without coil suppression (excluding bounce)

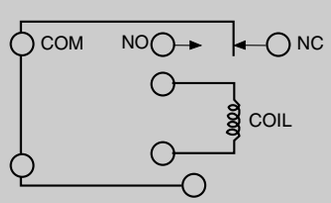
OPERATING CONDITIONS

Ambient Temperature	:	-40°C to +85°C
Maximum Temperature	:	155°C
Dielectric Strength	:	500VRMS
Insulation Resistance	:	100 Mꭿ Min. At 500 VDC, 25°C RH 50
Vibration Resistance without change in the switching state>10μS	:	10-200Hz, 20-40g
Shock Resistance without change in the switching state>10μS	:	30g, 11mS

CIRCUIT DIAGRAM



1Form A



1Form C

O/E/N India Limited

www.DataSheet4U.com

HOW TO ORDER

3572 - 1A - 12 - X - 01 - XX

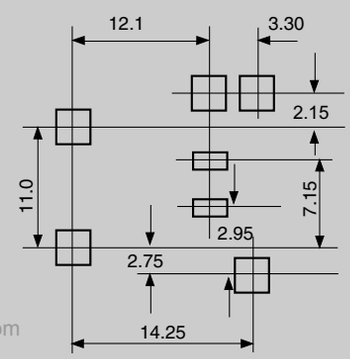
- 3572 - Product Series
- 1A - Contact Form (1A - 1 Form A, 1C - 1 Form C)
- 12 - Nominal Coil Voltage (Refer coil data)
- X - Plating (P- Nickel Plated Body, E-Copper Plated Body)
- 01 - 250g Release spring & 1.7mm wide contact Terminal
- XX - E-Immersion Cleanable (E5-Open)

COIL DATA

Nominal Voltage VDC	*Pick-up Voltage VDC (Max)	Drop-out Voltage VDC (Min)	Coil Resistance Ohms ± 10%
06	3.3	0.6	19
12	6.8	1.2	90
24	13.9	2.4	362

*Lower pick-up voltages available on request

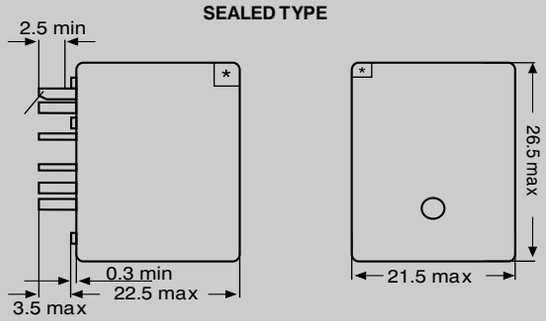
DRILLING PATTERN



www.DataSheet4U.com

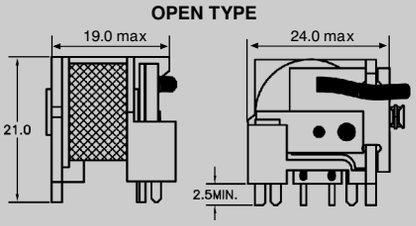
DIMENSIONS

SEALED TYPE



* Vent hole to be opened after PCB soldering and cleaning

OPEN TYPE



AVAILABLE ON REQUEST

- High Temperature winding wire
- Special coil resistance & pick-up
- Resistor / Diode across coil
- **For other custom solutions consult factory**

www.DataSheet4U.com

DATA ON VARIOUS TESTS CONDUCTED FOR OPERATING CONDITIONS*

TEST	TEST CONDITION	RESULT
Continuous Energisation test at Extreme temperature Conditions	Relay kept at 100^{0}C Coil Voltage : 14 VDC Load given : 30 A @ 12 VDC Duration : 5 Sec. On, 5 Sec. OFF No. of operation : 50000 The above test repeated at - 30^{0}C for 50000 operations	Relays successfully completed 100000 operations at given load
Thermal cycling	Relay subjected to :- -30^{0}C to + 100^{0}C in 2 Hrs. with coil ON +100^{0}C for 2 Hrs. with coil ON +100^{0}C to - 30^{0}C in 2 Hrs. with 1 Hrs. Coil ON & 1 Hrs. Coil OFF -30^{0}C for two Hrs. with Coil ON No. of Cycles : 3	All operating parameters within the specifications after test
Shock Voltage	Relay is subjected to :- Max. Voltage : 100VDC Shock Wave : Exponential Damping vibration Time : 500 micro Sec. Period : 30 Sec. Test Time : 10 Hrs.	After the test, all operating parameters of the relay are within specification.
Dropping Impact	Relays dropped from a height of 1 Meter to a concrete floor	No change in operating parameters of the relay.
Jump Start	24 VDC for 1 minute conducting nominal current at 23^{0}C	Withstood successfully
Corrosion Resistance	5% Sodium Chloride solution applied to relay for 48 Hrs.	No damage to relay parts
Water Resistance test	IP 67 (For Sealed Version)	

www.DataSheet4U.com

*Typical values for relays with 12 VDC coil. For higher severity please consult factory