

# O/E/N 35

## MEDIUM POWER AUTOMOTIVE RELAY

### FEATURES

- Direct PCB Mountable
- Cost Effective
- Suitable for various loads
- Miniature Size

### APPLICATION

- Turn Signal & hazard warning lights
- Flashers
- Wiper Controls
- Head Lamp Control
- Starter Motors
- Security Systems

### TECHNICAL DATA FOR CONTACT SIDE :

Model	:	3501/3531	3521	3541
<b>Areas of Application</b>		<b>RESISTIVE / INDUCTIVE LOAD</b>	<b>INDICATOR LAMP LOAD</b>	<b>HEAD LAMPLOADS</b>
Contact Configuration	:	1A/1C	1A	1A
Contact Material	:	Silver Nickel	Palladium copper*/ Silver Nickel	Silver Tin Oxide
Contact Rating at 23°C - 12VDC	:	12A/8A(Res.)	360W (Lamp)	20A (Lamp)
24VDC	:	6A / 4A (Res.)	180W (Lamp)	10A (Lamp)
Electrical Life Operations Min.	:	1 x 10 <sup>5</sup>	1 x 10 <sup>6</sup>	2 x 10 <sup>5</sup>
Mechanical Life Operations Min.	:	1 x 10 <sup>7</sup>	1 x 10 <sup>7</sup>	1 x 10 <sup>7</sup>
Contact Voltage Drop at 10 A (Min)	:	60mV	100mV	60mV
Maximum Switching Current @ 12.8 VDC For 3 Sec.	:	50A	50A	50A

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

### GENERAL DATA FOR COIL SIDE

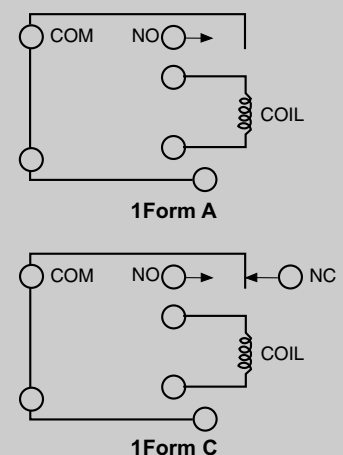
Nominal Coil Power	:	1.6W (Approx)
Operating Power	:	1.9W (Approx)
Operate Time**	:	10 milli Seconds
Release Time**	:	5 milli Seconds

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

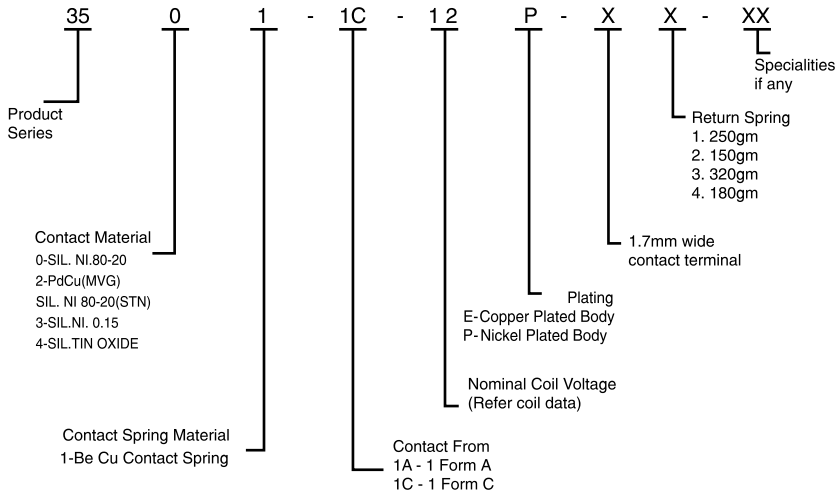
### OPERATING CONDITIONS

Ambient Temperature	:	-40°C to +85°C
Maximum Temperature	:	155°C
Dielectric Strength	:	500VRMS
Insulation Resistance	:	100 Meg. Ohms Min. At 500 VDC, 25°C RH 50
Vibration Resistance (without Change in switching state > 10μS)	:	10-100Hz 20 - 40g
Shock Resistance (without Change in switching state > 10μS)	:	30g, 8mS

### CIRCUIT DIAGRAM



## HOW TO ORDER

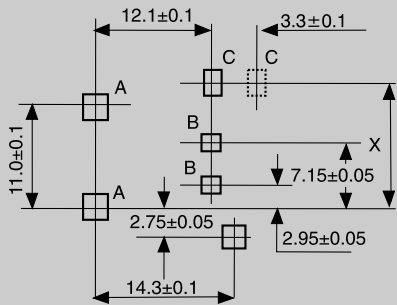


## COIL DATA

Nominal Voltage VDC	*Pick-up Voltage VDC (Max)	Drop-out Voltage VDC (Min)	Coil Resistance Ohms $\pm$ 10%
6	5	0.6	35
9	7	0.9	55
12	9	1.2	88
18	14	1.8	260
24	18	2.4	400
48	36	4.8	1700

\*\*Lower pick-up Voltages available on request

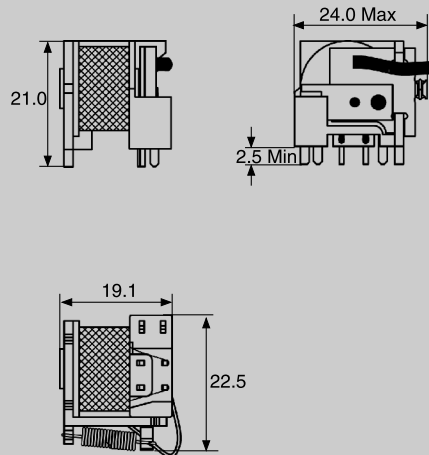
## DRILLING PATTERN



	DIM - X	SLOT - A	SLOT - B	SLOT - C
Std. Relay with 1.7 wide contact terminal (Std.)	13.15±0.1	1.7±0.1 SQ	1.1±0.1 SQ	2.0±0.1 x 1.1±0.1

Note:  
 Slot C given in dotted line is only to Std.1 form-C version. For holes in place of slots use  $\varnothing$ 2.3 holes instead of slots A  $\varnothing$ 1.3 holes instead of slots B & 2.1 holes instead of slots C

## DIMENSIONS



## AVAILABLE ON REQUEST

- Special contacts for higher contact rating
- Extra braided wire
- High temperature winding wire
- Special coil resistance & pick-up
- For other custom solutions consult factory