



Features

- Large switching capacity up to 40A
- Small size and light weight
- PCB pin and quick connect mounting available
- Suitable for automobile and lamp accessories
- QS-9000, ISO-9002 Certified Manufacturing

Contact Data

| | | | |
|---------------------|--|---------------------------|------------------------|
| Contact Arrangement | 1A = SPST N.O. 1B = SPST N.C. 1C = SPDT | Contact Resistance | < 30 milliohms initial |
| Contact Rating | 1A : 40A @ 14VDC 1B : 30A @ 14VDC 1C : 40A @ 14VDC N.O. and : 30A @ 14VDCN.C. | Contact Material | AgSnO ₂ |
| | | Maximum Switching Power | 630W |
| | | Maximum Switching Voltage | 75VDC |
| | | Maximum Switching Current | 40A |

Coil Data

| Coil Voltage VDC | | Coil Resistance Ω +/- 10% | | Pick Up Voltage VDC (max) | Release Voltage VDC (min) | Coil Power W | Operate Time ms | Release Time ms |
|------------------|------|---------------------------|-------|---------------------------|---------------------------|--------------|-----------------|-----------------|
| Rated | Max | 1.6W | 1.9W | 70% of rated voltage | 10% of rated voltage | | | |
| 6 | 7.8 | 22.5 | 19 | 4.20 | 6 | 1.60 or 1.90 | 7 | 5 |
| 12 | 15.6 | 90 | 75.8 | 8.40 | 1.2 | | | |
| 24 | 31.2 | 360 | 303.2 | 16.80 | 2.4 | | | |
| 48 | 62.4 | 1440 | 1212 | 33.60 | 4.8 | | | |

General Data

| | |
|--------------------------------------|-----------------------------------|
| Electrical Life @ rated load | 100K cycles, typical |
| Mechanical Life | 10M cycles, typical |
| Insulation Resistance | 100M Ω min. @ 500VDC |
| Dielectric Strength, Coil to Contact | 750V rms min. @ sea level |
| Contact to Contact | 500V rms min. @ sea level |
| Shock Resistance | 147m/s ² for 11 ms |
| Vibration Resistance | 1.5mm double amplitude 10~40Hz |
| Terminal (Copper Alloy) Strength | 8N (quick connect), 4N (PCB pins) |
| Operating Temperature | -40°C to +125°C |
| Storage Temperature | -40°C to +155°C |
| Solderability | 260°C for 5 s |
| Weight | 31g |

Caution

1. The use of any coil voltage less than the rated coil voltage may compromise the operation of the relay.

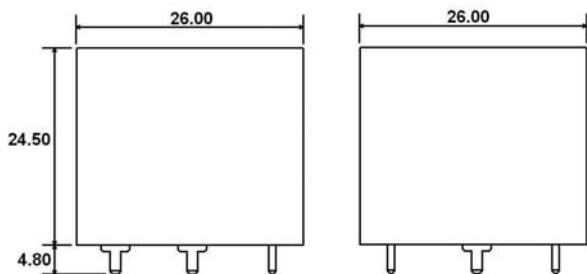
A2

Ordering Information

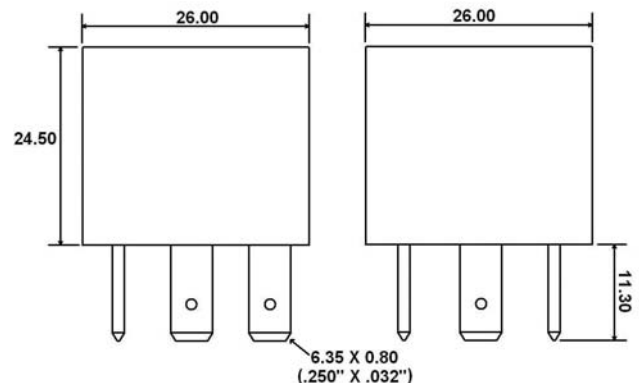
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|---|----|----|---|---|-------|-----|
| 1. Series | A2 | 1C | S | Q | 12VDC | 1.6 |
| A2 standard A2F with mounting flange A2M with metal bracket A2S with metal bracket and shroud | | | | | | |
| 2. Contact Arrangement | | | | | | |
| 1A = SPST N.O. 1B = SPST N.C. 1C = SPDT | | | | | | |
| 3. Sealing Option | | | | | | |
| S = Sealed C = Dust Cover *not available with A2S | | | | | | |
| 4. Termination | | | | | | |
| P = PCB Pins *not available with A2S Q = Quick Connect | | | | | | |
| 5. Coil Voltage | | | | | | |
| 6VDC 12VDC 24VDC 48VDC | | | | | | |
| 6. Coil Power | | | | | | |
| 1.6 = 1.6W 1.9 = 1.9W | | | | | | |
| 7. Coil Suppression | | | | | | |
| Blank = Standard D = Diode (1N4005) Cathode on "86" terminal D1 = Diode (1N4004) Cathode on "86" terminal R = Resistor (180Ω for 6VDC; 680Ω for 12VDC; 2700Ω for 24VDC) 2D = 2 Diodes (1N4005) DR = Diode & Resistor Cathode on "86" terminal (1N4005 & 180Ω for 6VDC; 680Ω for 12VDC; 2700Ω for 24VDC) ** Consult factory if other values are needed | | | | | | |

Dimensions

Units = mm



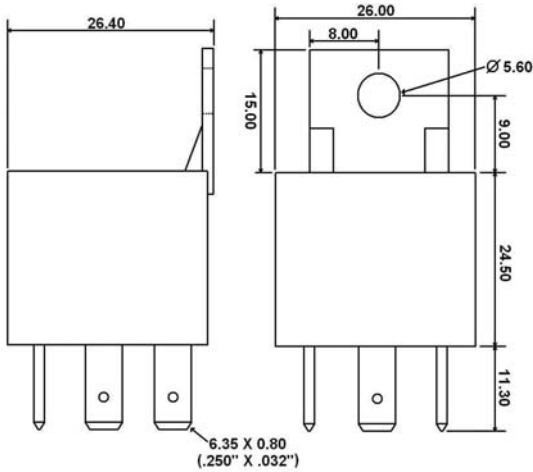
A2 with PC Pins



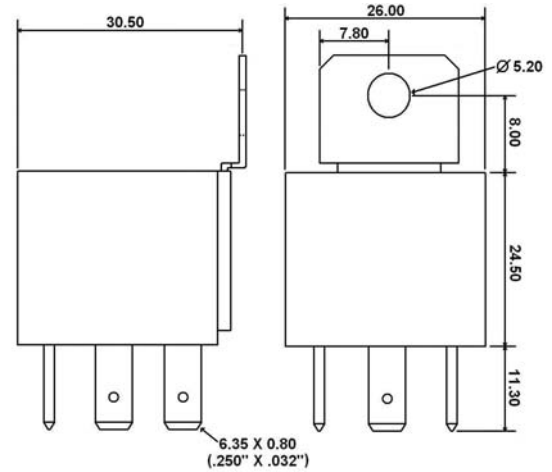
A2 with Quick Connect

Dimensions

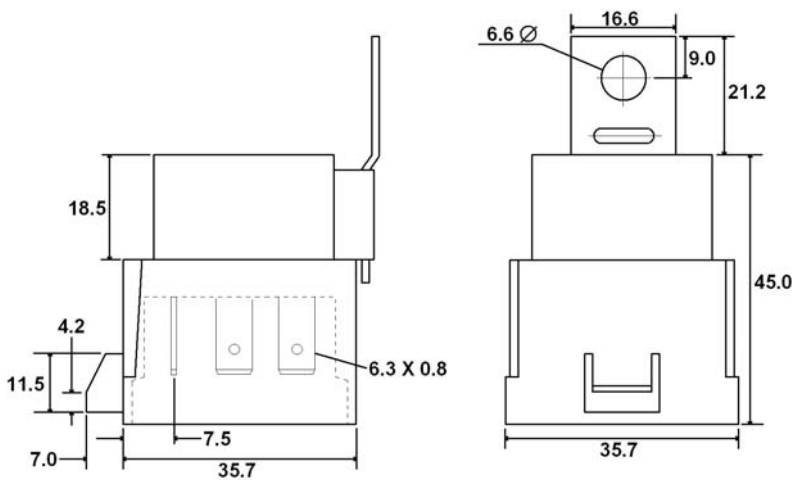
Units = mm



A2F with Quick Connect



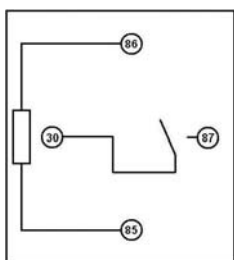
A2M with Quick Connect



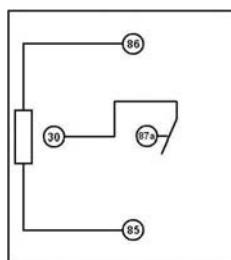
A2S with Quick Connect

Schematics & PC Layouts

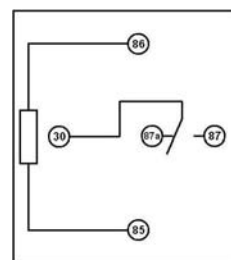
Bottom Views



1A



1B



1C

