



R56 Series General Purpose DIP Reed Relays, DC Operated

- Features
  - Standard Industry Packaging
  - Internal Clamping Diode Version (D-Suffix)
  - Separate Time: 330 µs Max.
- Electrical Specifications
  - Release Time: 75 µs Max.
  - Max. Current: 0.50 A
  - Operating Temperature: -45° to +85°C

| DC Operated |               |                 |                     |                    |             |               |      |
|-------------|---------------|-----------------|---------------------|--------------------|-------------|---------------|------|
| Stock No.   | Mfr.'s Type   | Nominal Voltage | Contact Arrangement | Coil Res. Ω (Typ.) | Max. Pickup | Min. Drop Out | EACH |
| 235-7562    | R56-5D.5-6    | 6 VDC           | SPDT                | 180                | 4.5 VDC     | 0.5 VDC       | 6.10 |
| 235-7560    | R56-7D.5-6D   | 5 VDC           | DPST-NO             | 200                | 3.8 VDC     | 0.8 VDC       | 4.54 |
| 235-7564    | R56S-5D.5-12D | 12 VDC          | SPDT                | 500                | 8.0 VDC     | 1.0 VDC       | 6.36 |

R46 Series General Purpose Relays

- Features
  - All Sealed and Resistant to Wave Soldering and Cleaning
  - Less Than 0.53 Cubic Inches
- Electrical Specifications
  - Operating Time: 10 mS Max.
  - Release Time: 5 mS Max.
  - Operating Temperature: -25° to +70°C

| DC Operated |             |                 |                     |                    |               |                               |      |
|-------------|-------------|-----------------|---------------------|--------------------|---------------|-------------------------------|------|
| Stock No.   | Mfr.'s Type | Nominal Voltage | Contact Arrangement | Coil Res. Ω (Typ.) | Nominal Power | Max. Contact Current @ 30 VDC | EACH |
| 235-7700    | R46-5D12-6  | 6 VDC           | SPDT                | 100                | 360 mW        | 12 A                          | 3.19 |
| 235-7702    | R46-5D12-12 | 12 VDC          | SPDT                | 100                | 360 mW        | 12 A                          | 3.19 |

R51 Series Automotive Relays

- Features
  - Industry Standard Pinout
  - 0.250" Quick Connect Terminals
- Electrical Specifications
  - Operating Time: 7 mS Max.
  - Release Time: 2 mS Max.
  - Operating Temperature: -40°C to 125°C

| Stock No. | Mfr.'s Type  | Nominal Voltage | Contact Arrangement | Coil Res. Ω (Typ.) | Nominal Power | Max. Contact Current @ 14 VDC | EACH |
|-----------|--------------|-----------------|---------------------|--------------------|---------------|-------------------------------|------|
| 235-0508  | R51-1D40-12F | 12 VDC          | SPST-NO             | 90                 | 1.6 W         | 40 A                          | 5.72 |
| 235-0510  | R51-1D70-12  | 12 VDC          | SPST-NO             | 72                 | 2.0 W         | 70 A                          | 7.06 |
| 235-0506  | R51-5D40-12F | 12 VDC          | SPDT                | 90                 | 1.6 W         | 40 A                          | 6.92 |

R40 Series Sensitive Coil Single Contact Relays

- Features
  - Epoxy Sealed
  - Ultra-Sensitive Coil
  - Standard 0.100" DIP PC Mount Terminal
- Electrical Specifications
  - Operating Time: 4.5 mS Approx.
  - Release Time: 1.5 mS Approx.
  - Operating Temperature: -40° to +70°C

| Stock No. | Mfr.'s Type  | Nominal Voltage | Contact Arrangement | Coil Res. Ω (Typ.) | Nominal Power | Max. Contact Current @ 28 VDC | EACH |
|-----------|--------------|-----------------|---------------------|--------------------|---------------|-------------------------------|------|
| 235-0036  | R40-11D2-5/6 | 5/6 VDC         | DPDT                | 167                | 0.15 W        | 2 A                           | 4.74 |
| 235-0037  | R40-11D2-12  | 12 VDC          | DPDT                | 960                | 0.15 W        | 2 A                           | 5.28 |
| 235-0038  | R40-11D2-24  | 24 VDC          | DPDT                | 2880               | 0.20 W        | 2 A                           | 4.74 |

Relay and Circuit Breaker Catalog

- Over 3000 New Cross References, Now Totaling over 44,000
  - Seven Entirely New Series
  - Twelve New R17 Types, 10 Amp Industrial Plug-In Relays
  - Two New R64 Types, Programmable AC or DC Multifunctional Time Delay Relays
- Four New R66 Types, 10 Amp Alternating Relays
  - Three New R67 Types, 10 Amp Voltage Monitoring Relays
  - Two New R68 Types, 10 Amp Phase Monitoring Relays
  - Two New RS4 Types, PC Board Solid State Relays
  - Four New RB Types, AC Buzzers

NTE is proud to introduce the sixth edition of its Relay, Circuit Breakers, and Accessories Technical Guide and Cross Reference. Fully updated, this new catalog lists NTE replacements for more than 44,000 industry part numbers. NTE's extensive line of UL and CSA listed relays and circuit breakers now includes the seven new series listed above and additional types added to the following series: R02 types with mechanical indicators, R04 types with SPST-NO contacts, R10 types with SPDT and 3PDT contacts, R12 types with 3PDT contacts, hermetically sealed types and more coil voltage selections, R14 types with 3PDT and 4PDT contacts, R16 types with PC mount option, R45 types with flange mount option, R46 types with 48 VDC coils, R48 types with a low power coil option and R55 types with flange mount option.

235-0201, RC-006.....EACH 5.25

RS4 Series Solid State Relay, 1 Amp

- Features
  - Current or Voltage Input Types
  - SCR Output
  - Zero Crossing Switching
  - Standard 16-Lead DIP Type Package with Four Pins
- Electrical Specifications
  - Operating Temperature: -30°C to +80°C

| Stock No. | Mfr.'s Type | Input Specifications  |                      |                       | EACH |
|-----------|-------------|-----------------------|----------------------|-----------------------|------|
|           |             | Control Current Range | Must Turn On Current | Must Turn Off Current |      |
| 235-7600  | RS4-1D1-A   | 10-35 mA              | 10.0 mA              | 1.0 mA                | 8.94 |

| Stock No. | Mfr.'s Type | Input Specifications  |                      |                       | EACH |
|-----------|-------------|-----------------------|----------------------|-----------------------|------|
|           |             | Control Voltage Range | Must Turn On Voltage | Must Turn Off Voltage |      |
| 235-7602  | RS4-1D1-B   | 3.5-10 VDC            | 3.5 VDC              | 1.0 VDC               | 9.38 |

RS1 Series Solid State Relay, 4 Amp

- Features
  - Industry Standard Package
  - Thick Film Hybrid Construction
  - 4 kV Optical Isolation
  - PC Board Mountable
- Electrical Specifications
  - Response Time: 0.5 Cycle
  - Input Current: 25 mA DC Max.
  - On-State Voltage Drop: 1.6 V Peak
  - Operating Temperature: -30° to +80°C

| Stock No. | Mfr.'s Type | Input Parameters    |                          |                      | Output Parameters      |                       |                    | EACH  |
|-----------|-------------|---------------------|--------------------------|----------------------|------------------------|-----------------------|--------------------|-------|
|           |             | Control Voltage VDC | Min. Turn On Voltage VDC | Drop Out Voltage VDC | Line Voltage Range VAC | Max. On-State Current | Max. 1-Cycle Surge |       |
| 235-0045  | RS1-1D4-21  | 3-24                | 3                        | 1                    | 24-280                 | 3.5 A                 | 100 A              | 11.91 |

RS3 Series Solid State Heavy Duty Power Relays

- Features
  - Back-to-Back Dual SCRs
  - TRIAC Version (T Suffix)
  - Panel Mount
- Electrical Specifications
  - Input Current: 4 mA DC Max
  - On-State Voltage Drop: 1.6 V Peak

| Stock No. | Mfr.'s Type  | Input Parameters    |                          |                      | Output Parameters      |                       |                    | EACH  |
|-----------|--------------|---------------------|--------------------------|----------------------|------------------------|-----------------------|--------------------|-------|
|           |              | Control Voltage VDC | Min. Turn On Voltage VDC | Drop Out Voltage VDC | Line Voltage Range VAC | Max. On-State Current | Max. 1-Cycle Surge |       |
| 235-0046  | RS3-1D10-51  | 3-32                | 3                        | 1                    | 24-330                 | 10 A                  | 40 A               | 17.81 |
| 235-0047  | RS3-1D25-24T | 3-32                | 3                        | 1                    | 48-280                 | 25 A                  | 215 A              | 24.45 |
| 235-0048  | RS3-1D40-21  | 3-32                | 3                        | 1                    | 80-530                 | 40 A                  | 600 A              | 35.06 |
| 235-0120  | RS3-1D75-21  | 3-32                | —                        | —                    | 24-280                 | 75 A                  | 700 A              | 67.20 |

| AC Operated <span>— NEW —</span> |             |                     |                          |                      |                        |                       |                    |       |
|----------------------------------|-------------|---------------------|--------------------------|----------------------|------------------------|-----------------------|--------------------|-------|
| Stock No.                        | Mfr.'s Type | Input Parameters    |                          |                      | Output Parameters      |                       |                    | EACH  |
|                                  |             | Control Voltage VAC | Min. Turn On Voltage VAC | Drop Out Voltage VAC | Line Voltage Range VAC | Max. On-State Current | Max. 1-Cycle Surge |       |
| 235-0105                         | RS3-1A10-52 | 90-280              | 80                       | 20                   | 24-330                 | 10 A                  | 40 A               | 19.33 |
| 235-0110                         | RS3-1A25-42 | 90-280              | 90                       | 10                   | 48-280                 | 25 A                  | 245 A              | 56.65 |
| 235-9991                         | RS3-1A40-22 | 90-280              | 90                       | 10                   | 48-280                 | 40 A                  | 245 A              | 38.17 |

