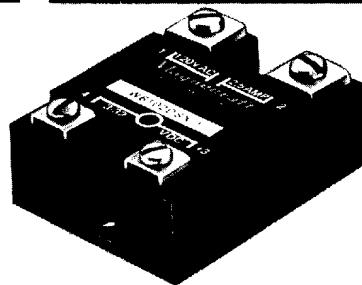


HIGH RELIABILITY TYPE

3-32 VDC INPUT
50/60 Hz AC OUTPUT

CLASS 6
DC CONTROLLED INPUT
AC SCR OUTPUT
SOLID STATE RELAYS



- High Transient Capability**—Single output features back to back SCR's and internal mounted RC (snubber) network for high dv/dt applications.
- Photo-Isolated, Zero Switching**—Optically coupled for 4000 VAC isolation between input and output and RFI suppression.

Meets UL 1950 (IEC 950) standard for usage in SEL V (safe extra low voltage) circuits



VDE

Approved

UL Recognized
File No. E62636

CSA Certified
File No. LR1689

All models conform to VDE 0160,
VDE 0110 Group C, and VDE 0411 Class 1.

NEW!

| STOCK NUMBERS | W6102 DSX-1 | W6110 DSX-1 | W6125 DSX-1 | W6140 DSX-1 | W6202 DSX-1 | W6210 DSX-1 | W6225 DSX-1 | W6240 DSX-1 | W6275 DSX-1 | |
|---|--------------------|-------------------------|----------------|----------------|----------------|----------------|-------------------------|----------------|----------------|--|
| INPUT CHARACTERISTICS | | | | | | | | | | |
| Input Voltage Range (over operating temperature range) | 3 to 32 Volts DC | | | | | | | | | |
| Maximum Pickup Voltage (over operating temperature range) | 3 Volts DC | | | | | | | | | |
| Minimum Dropout Voltage (over operating temperature range) | 1 Volts DC | | | | | | | | | |
| Input Impedance | 1500 ohms minimum | | | | | | | | | |
| Reverse Polarity Protected | Yes | | | | | | | | | |
| Input Filtered for transients less than one millisecond. | Yes | | | | | | | | | |
| Response Time | 1/2 Cycle Max. | | | | | | | | | |
| OUTPUT CHARACTERISTICS | | | | | | | | | | |
| Nominal Off State Voltage V_D (RMS) | 400 | | | | 600 | | | | | |
| Maximum Off State Voltage V_D MAX (RMS) | 140 | | | | 280 | | | | | |
| Minimum Off State Voltage V_D MIN (RMS) | 20 | | | | 40 | | | | | |
| Non-Repetitive Peak Voltage V_{DSM} (Blocking Voltage) | 300 | | | | 500 | | | | | |
| Maximum Rate of Rise of Off State Voltage dv/dt | 200 | 500 Volts per microsec. | | | | 200 | 500 Volts per microsec. | | | |
| Rated Load Current I_T (RMS)* | 2.5 | 10.0 | 25.0 | 40 | 40 | 10.0 | 25.0 | 40 | 75 | |
| U/L Incandescent Lamp Ampere Rating | 2.0 | 8.0 | 16.0 | 30 | 2.0 | 8.0 | 16.0 | 30 | 39 | |
| U/L Motor Load Ampere Rating | 1.0 | 4.5 | 8 | 14 | 1.0 | 4.5 | 8 | 14 | 25 | |
| Minimum Load Current $I_{T MIN}$ (RMS) to maintain "On" | 50 ma. | | | | | | | | | |
| Non-Repetitive Surge Current I_{TSM} (one Cycle Surge) | 22.5 | 120 | 250 | 625 | 22.5 | 120 | 250 | 625 | 1000 | |
| Maximum RMS Overload current for 1 second | 5 | 24 | 40 | 80 | 5 | 24 | 40 | 80 | 150 | |
| Maximum Off State Leakage current I_D (RMS) | 8 ma | | | | 10 ma | | | | | |
| Maximum RMS On-State Voltage V_T (RMS) Maximum | 3.5 | | | | 1.6 | | | | | |
| Voltage drop across relay output @ rated current | 3.5 | | | | 3.5 | | | | | |
| MISCELLANEOUS CHARACTERISTICS | | | | | | | | | | |
| Max I ^T For Fusing (8-3ms) A ² sec | 2.1 | 60 | 260 | 1620 | 2.1 | 60 | 260 | 1620 | 4180 | |
| Thermal Resistance Junction To Case (T_j , Max.= 115°C) °c/w | 8.5 | 1.78 | 1.02 | 0.63 | 8.5 | 1.78 | 1.02 | 0.63 | 0.18 | |
| Suggested Heat Sink | 16-790 or 16-793 | | | | | | | | 16-793 | |
| Dielectric Strength V_{ISO} (Input-Output Isolation) | 4,000 VAC | | | | | | | | | |
| Insulation Resistance R_{ISO} @ 500VDC | 10 ¹⁰ Ω | | | | | | | | | |
| Operating temperature Range | -30°C to +80°C | | | | | | | | | |
| Storage temperature Range | -40°C to +120°C | | | | | | | | | |
| Weight | 4 oz. (113.4 g) | | | | | | | | | |

*All current ratings are based on use of suitable thermally conductive compound (e.g. silicone grease between the SSR mounting base and mounting surface of suitable heat sink).