

High Voltage, Fast Recovery Medium Current Rectifier H1601 Series

Platinum Doped
Uniform Chip-to-Chip Recovery
High Voltage
Medium Current
Fast t_{rr}

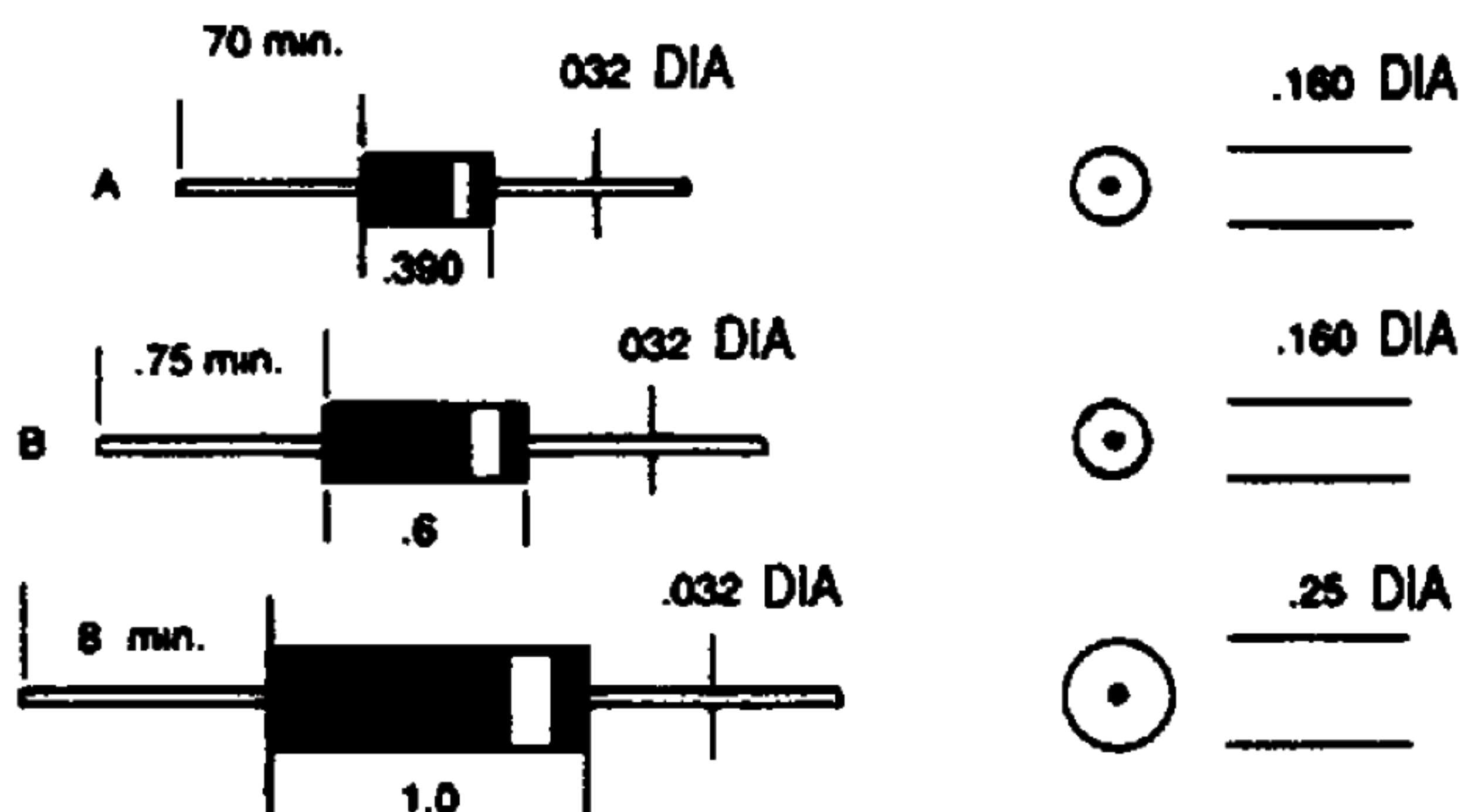
MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

| MQSI Part No. | Package Style | Repetitive Peak Reverse Voltage V_{RRM} | Average Forward Current (Fig. 1) $I_{F(AV)}$ | RMS Forward Current $I_{F(RMS)}$ | Non-Repetitive Peak Surge Current I_{FSM} 1/2 Cycle @ 60 Hz | Forward Voltage @ $I_F = 100\text{mA}$ V_F |
|---------------|---------------|-------------------------------------------|----------------------------------------------|----------------------------------|------------------------------------------------------------------|----------------------------------------------|
| H1601-1 | A | 1.0KV | 400mA | 625mA | 35A | 4V |
| H1601-1.5 | A | 1.5KV | 400mA | 625mA | 35A | 4V |
| H1601-2 | A | 2.0KV | 250mA | 390mA | 30A | 7V |
| H1601-3 | A | 3.0KV | 250mA | 390mA | 30A | 7V |
| H1601-4 | A | 4.0KV | 170mA | 265mA | 25A | 10V |
| H1601-5 | A | 5.0KV | 170mA | 265mA | 25A | 10V |
| H1601-6 | B | 6.0KV | 130mA | 200mA | 20A | 16V |
| H1601-8 | B | 8.0KV | 130mA | 200mA | 20A | 16V |
| H1601-10 | B | 10.0KV | 100mA | 155mA | 15A | 20V |
| H1601-12 | B | 12.0KV | 100mA | 155mA | 15A | 20V |
| H1601-15 | C | 15.0KV | 70mA | 110mA | 10A | 30V |
| H1601-18 | C | 18.0KV | 70mA | 110mA | 10A | 30V |

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

| | SYMBOL | | UNITS |
|-----------------------------------------------------------------------------------------------------------------------|-----------|---------------|------------------|
| Maximum DC Reverse current at rated V_{RRM} | I_R | 1 | μA |
| Maximum DC Reverse Current at 80% rated V_{RRM} 100°C | I_R | 10 | μA |
| Maximum Reverse Recovery Time At $I_F = 50\text{mA}$, $I_R = 100\text{mA}$, and $I_{RR} = -25\text{mA}$ (Fig. 2) | t_{rr} | 250 | nsec |
| Ambient Operating Temperature | T_A | - 55 to + 125 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | - 55 to + 150 | $^\circ\text{C}$ |

DIMENSIONS IN INCHES



The rectifier as packaged can be tested in air (25°C , $< 55\% \text{RH}$) at rated V_{RRM} . However, in a dusty or humid environment, the rectifier should be overmolded or operated in oil or a gaseous dielectric to prevent corona or arcing. Dimensional tolerances in inches $.X \pm .10"$, $.XX \pm .02"$, $.XXX \pm .005"$.

**AVERAGE FORWARD CURRENT, $I_{F(AV)}$ (mA)
RESISTIVE LOAD, SINEWAVE**

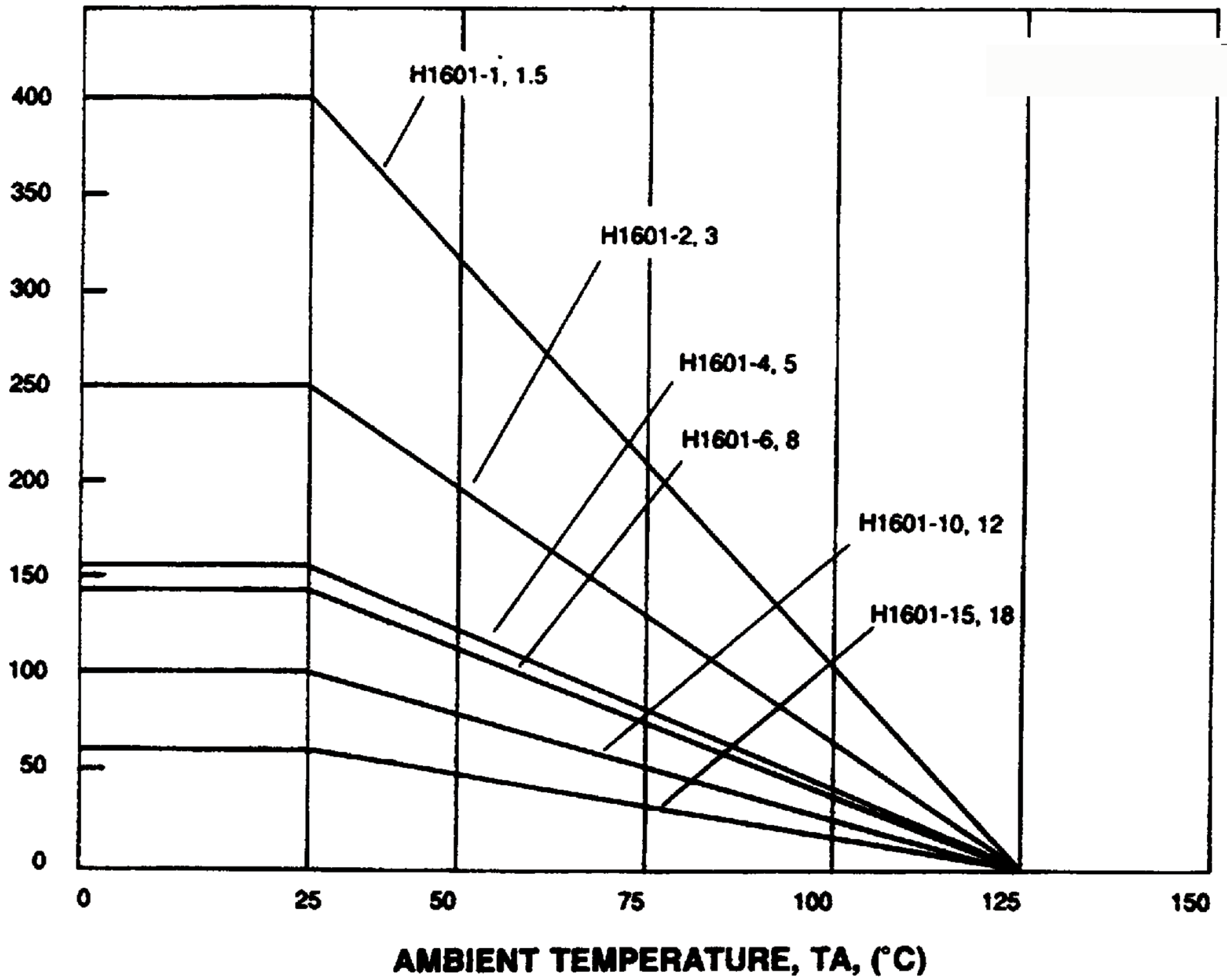


FIGURE 1

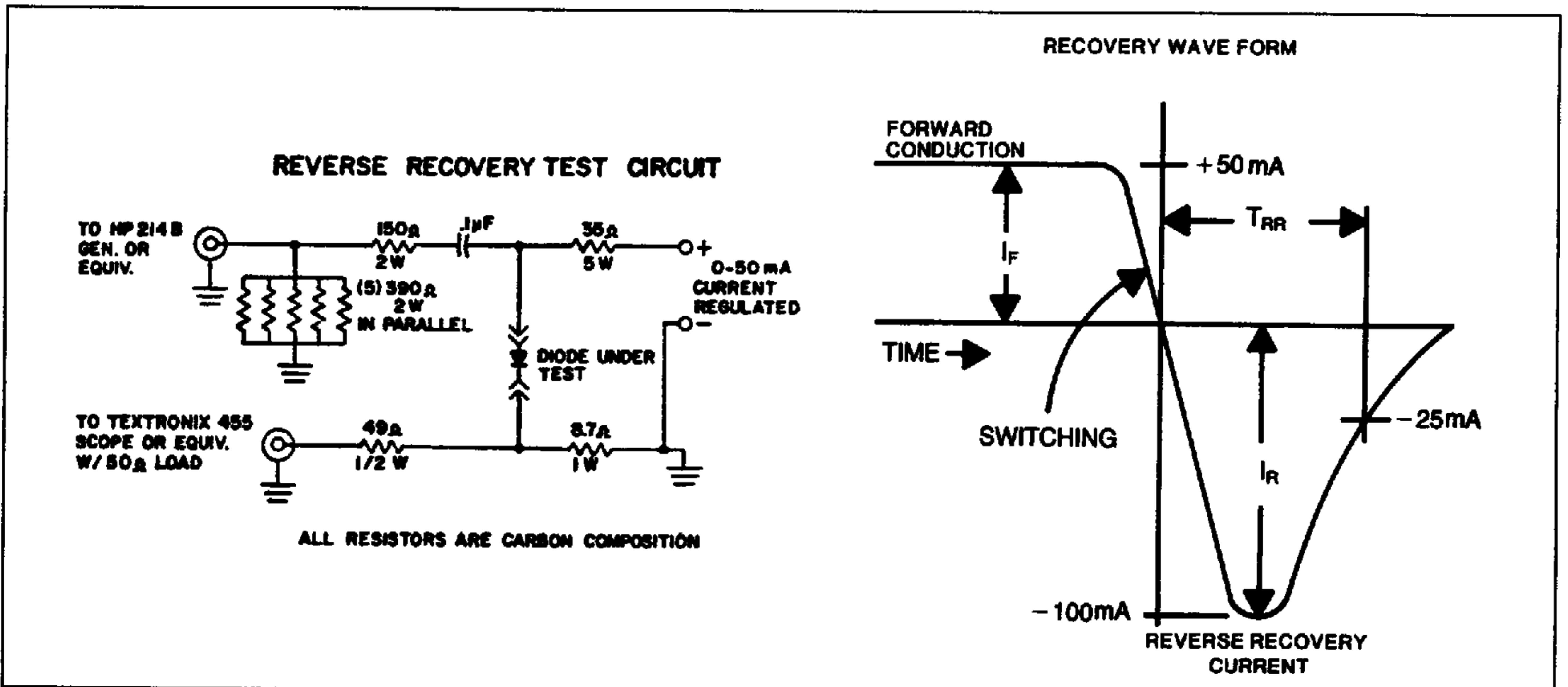


FIGURE 2