

# Optoisolators (continued)

## Table 39. High Voltage Transistor Output

|         |        |    |    |         |     |    |     |           |    |     |      |  |     |     |    |
|---------|--------|----|----|---------|-----|----|-----|-----------|----|-----|------|--|-----|-----|----|
| MOC8204 | 20     | 10 | 10 |         | 0.4 | 10 | 0.5 | 5*        | 2* | 10* | 100* |  | 400 | 1.5 | 10 |
| H11D1   | 20     | 10 | 10 | 3500    | 0.4 | 10 | 0.5 | 5*        | 2* | 10* | 100* |  | 300 | 1.5 | 10 |
| H11D2   | 20     | 10 | 10 | 2500    | 0.4 | 10 | 0.5 | 5*        | 2* | 10* | 100* |  | 300 | 1.5 | 10 |
| H11D3   | 20     | 10 | 10 | 2500    | 0.4 | 10 | 0.5 | 5*        | 2* | 10* | 100* |  | 200 | 1.5 | 10 |
| H11D4   | 10     | 10 | 10 | 2500    | 0.4 | 10 | 0.5 | 5*        | 2* | 10* | 100* |  | 200 | 1.5 | 10 |
| 4N38    | 10     | 10 | 10 | 1500    | 1   | 20 | 4   | 0.8/7     | 10 | 10  |      |  | 80  | 1.5 | 10 |
| 4N38A   | 10     | 10 | 10 | 2500    | 1   | 20 | 4   | 0.8/7     | 10 | 10  |      |  | 80  | 1.5 | 10 |
| MCT275  | 70-210 | 10 | 10 | 3000(R) | 0.4 | 16 | 2   | 4.5*/3.5* | 2* | 5*  | 100* |  | 80  | 1.5 | 20 |

## Table 40. Triac Driver Output

| Device  | Peak Blocking Voltage Min | LED Trigger Current- $I_{FT}$ ( $V_{TM} = 3\text{ V}$ ) mA Max | Zero Crossing Inhibit Voltage (at rated $I_{FT}$ ) Volts Max | $V_{ISO}$ Vac Pk | $dv/dt$ V/ $\mu s$ Typ |
|---------|---------------------------|----------------------------------------------------------------|--------------------------------------------------------------|------------------|------------------------|
| MOC3009 | 250                       | 30                                                             | —                                                            | 7500             | 10                     |
| MOC3010 | 250                       | 15                                                             | —                                                            | 7500             | 10                     |
| MOC3011 | 250                       | 10                                                             | —                                                            | 7500             | 10                     |
| MOC3012 | 250                       | 5                                                              | —                                                            | 7500             | 10                     |
| MOC3020 | 400                       | 30                                                             | —                                                            | 7500             | 10                     |
| MOC3021 | 400                       | 15                                                             | —                                                            | 7500             | 10                     |
| MOC3022 | 400                       | 10                                                             | —                                                            | 7500             | 10                     |
| MOC3023 | 400                       | 5                                                              | —                                                            | 7500             | 10                     |
| MOC3031 | 250                       | 15                                                             | 20                                                           | 7500             | 100                    |
| MOC3032 | 250                       | 10                                                             | 20                                                           | 7500             | 100                    |
| MOC3033 | 250                       | 5                                                              | 20                                                           | 7500             | 100                    |
| MOC3041 | 400                       | 15                                                             | 20                                                           | 7500             | 100                    |
| MOC3042 | 400                       | 10                                                             | 20                                                           | 7500             | 100                    |
| MOC3043 | 400                       | 5                                                              | 20                                                           | 7500             | 100                    |
| MOC3061 | 600                       | 15                                                             | 20                                                           | 7500             | 1500                   |
| MOC3062 | 600                       | 10                                                             | 20                                                           | 7500             | 1500                   |
| MOC3063 | 600                       | 5                                                              | 20                                                           | 7500             | 1500                   |
| MOC3081 | 800                       | 15                                                             | 20                                                           | 7500             | 1500                   |
| MOC3082 | 800                       | 10                                                             | 20                                                           | 7500             | 1500                   |
| MOC3083 | 800                       | 5                                                              | 20                                                           | 7500             | 1500                   |

## Table 41. SCR Output

| Device  | Peak Blocking Voltage Min | LED Trigger Current- $I_{FT}$ ( $V_{AK} = 50\text{ V}$ ) mA Max | $V_{ISO}$ Vac Pk | $dv/dt$ V/ $\mu s$ Typ |
|---------|---------------------------|-----------------------------------------------------------------|------------------|------------------------|
| 4N39    | 200                       | 30                                                              | 1500             | 500                    |
| 4N40    | 400                       | 30                                                              | 1500             | 500                    |
| H11C1   | 200                       | 20                                                              | 3535             | 500 Min                |
| H11C2   | 200                       | 20                                                              | 2500             | 500 Min                |
| H11C3   | 200                       | 30                                                              | 2500             | 500 Min                |
| H74C1   | 200                       | (TTL drive)                                                     | 2500             |                        |
| MCS2    | 200                       | 14( $V_{AK} = 100\text{ V}$ )                                   | 3000 RMS         |                        |
| MCS2400 | 400                       | 14( $V_{AK} = 100\text{ V}$ )                                   | 3000 RMS         |                        |
| MOC3000 | 400                       | 20                                                              | 7500             | 500                    |
| MOC3001 | 400                       | 30                                                              | 7500             | 500                    |
| MOC3002 | 250                       | 30                                                              | 7500             | 500                    |
| MOC3003 | 250                       | 20                                                              | 7500             | 500                    |
| MOC3007 | 200                       | 40                                                              | 7500             | 500                    |
| H11C4   | 400                       | 20                                                              | 3535             | 500                    |
| H11C5   | 400                       | 20                                                              | 2500             | 500                    |
| H11C6   | 400                       | 30                                                              | 2500             | 500                    |

## Table 42. Schmitt Trigger Output

| Device  | Threshold Current On mA Max | Threshold Current Off mA Min | $I_{F(off)}/I_{F(on)}$ Min | $I_{F(off)}/I_{F(on)}$ Max | $V_{CC}$ Min | $V_{CC}$ Max | $t_r, t_f$ $\mu s$ Typ | $V_{ISO}$ Vac Pk |
|---------|-----------------------------|------------------------------|----------------------------|----------------------------|--------------|--------------|------------------------|------------------|
| H11L1   | 1.6                         | 0.3                          | 0.5                        | 0.9                        | 3            | 15           | 0.1                    | 3535             |
| H11L2   | 10                          | 0.3                          | 0.5                        | 0.9                        | 3            | 15           | 0.1                    | 3535             |
| MOC5007 | 1.6                         | 0.3                          | 0.5                        | 0.9                        | 3            | 15           | 0.1                    |                  |
| MOC5008 | 4                           | 0.3                          | 0.5                        | 0.9                        | 3            | 15           | 0.1                    |                  |
| MOC5009 | 10                          | 0.3                          | 0.5                        | 0.9                        | 3            | 15           | 0.1                    |                  |

(R) = RMS (D) = DC \* $t_{on}, t_{off}$