

IO AVERAGE RECTIFIED FORWARD CURRENT (AMPERES)

T. 25.01

| VRRM | 3 | 3 | 5 | 6 | 6 | 6 | 12 | 15 | 20 | 20 | 25 | 25 | |
|------|-------|--------|--------|---------|-----|--------|-------|---------|--------|--------|---------|--------|--------|
| 50 | MR500 | IN5400 | IN1612 | IN1341A | | | MR750 | IN1199A | IN3208 | IN248B | IN1191A | IN2154 | IN3491 |
| 100 | MR501 | IN5401 | IN1613 | IN1342A | | | MR751 | IN1200A | IN3209 | IN249B | IN1192A | IN2155 | IN3492 |
| 150 | | | | IN1343A | | | | IN1201A | | | IN1193A | | |
| 200 | MR502 | IN5402 | IN1614 | IN1344A | | | MR752 | IN1202A | IN3210 | IN250B | IN1194A | IN2156 | IN3493 |
| 300 | | | | IN1345A | | | | IN1202A | | | IN1195A | IN2157 | |
| 400 | MR504 | IN5404 | IN1615 | IN1346A | | | MR704 | IN1204A | IN3212 | | IN1196A | IN2158 | IN3495 |
| 500 | | | | IN1347A | | | | IN1205A | | | IN1197A | IN2159 | |
| 600 | MR506 | IN5406 | IN1616 | IN1348A | | | MR756 | IN1206A | IN3214 | | IN1198A | IN2160 | |
| 700 | | | | | | IN3987 | | IN3670A | | | | | |
| 800 | MR508 | IN5407 | | | | IN3988 | MR758 | IN3671A | | | | | |
| 900 | | | | | | IN3989 | | IN3672A | | | | | |
| 1000 | MR510 | IN5408 | | | | IN3990 | MR760 | IN3673A | | | | | |
| 1200 | | | | | | | | IN5331 | | | | | |
| IFSM | 100 | 200 | | 150 | 50 | 400 | 300 | 250 | 600 | 350 | 400 | 300 | |
| VFM | 1 | 1.2 | 1.5 | 1.4 | 1.5 | 1.25 | 1.3 | 1.5 | 1.5 | 1.2 | 1.8 | 1.7 | |
| CASE | A1 | A1 | D04 | D04 | D04 | A2 | D04 | D04 | D05 | D05 | D05 | D021 | |

Available in "R" - REVERSE POLARITY versions.

FAST RECOVERY RECTIFIERS

SCHOTTKY RECTIFIERS

| IO AVERAGE RECTIFIED FORWARD CURRENT (AMPERES) | | | | | |
|--|-------|--------|--------|--------|--------|
| VRRM (VOLTS) | 5 | 6 | 12 | 20 | 30 |
| 50 | MR820 | IN3879 | IN3889 | IN3899 | IN3909 |
| 100 | MR821 | IN3880 | IN3890 | IN3900 | IN3910 |
| 200 | MR822 | IN3881 | IN3891 | IN3901 | IN3911 |
| 400 | MR824 | IN3883 | IN3893 | IN3903 | IN3913 |
| 600 | MR826 | | | | |
| 800 | | | | | |
| 1000 | | | | | |
| IFSM (Amps) | 300 | 150 | 200 | 250 | 300 |
| VFM | 1 | 1.5 | 1.5 | 1.5 | 1.5 |
| tRR (us) | .2 | .2 | .2 | .2 | .2 |
| | A2 | D04 | | D05 | |

| IO AVERAGE RECTIFIED FORWARD CURRENT (AMPERES) | | | | |
|--|--------|--------|--------|--------|
| VRRM (VOLTS) | 15 | 25 | 40 | 50 |
| 20 | IN5826 | IN5829 | | IN5832 |
| 30 | IN5827 | IN5830 | IN6095 | IN5833 |
| 35 | | | | |
| 40 | IN5828 | IN5831 | IN6096 | IN5834 |
| 45 | | | SD41 | SD51 |
| IFSM (Amps) | 500 | 800 | 400 | 800 |
| VFM | .5 | .48 | .86 | .59 |
| | | | D04 | D05 |

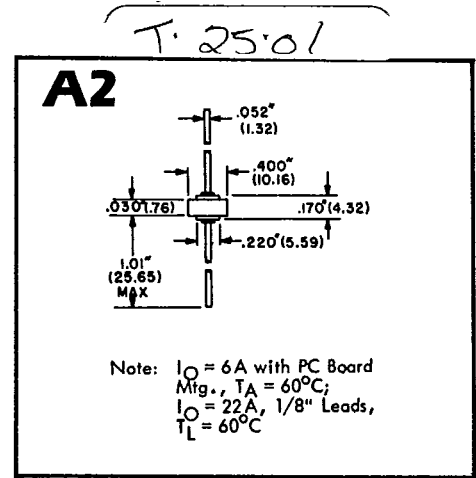
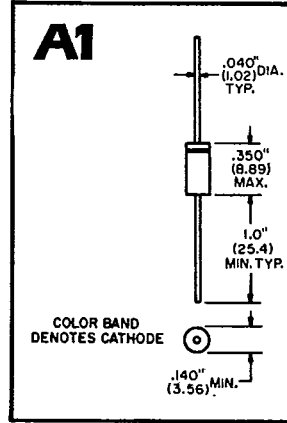
SILICON CONTROLLED RECTIFIERS

ON-STATE (RMS) CURRENT AMPERES

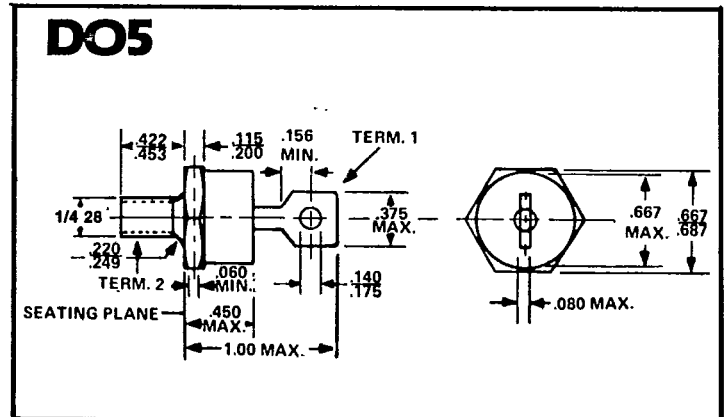
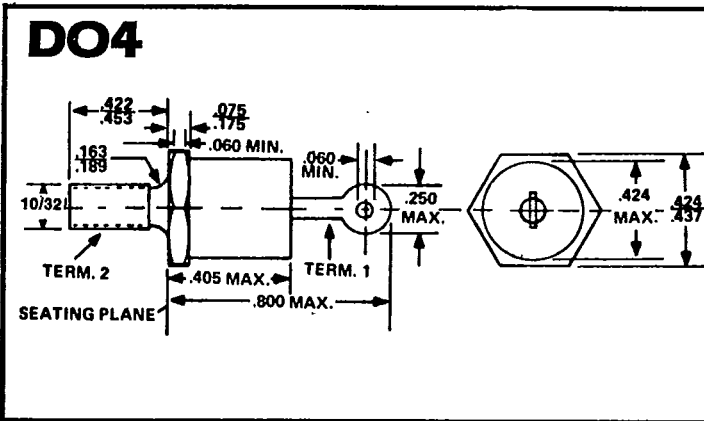
| VDRM VRRM | .5 | .8 | 1.6 | 1.6 | 1.6 | 1.6 | 4 | 4 | 7.4 | 8 | 8 | 8 |
|--------------|-------|--------|--------|------|--------|--------|--------|--------|--------|---------|-------|------|
| 25 | 2N877 | 2N5060 | | C6U | 2N2322 | 2N2344 | 2N6236 | C106Y1 | 2N1770 | | | C15U |
| 50 | 2N878 | 2N5061 | 2N1595 | C6F | 2N2323 | 2N2345 | 2N6237 | C106F1 | 2N1771 | 2N4441T | C122F | C15F |
| 100 | 2N897 | 2N5062 | 2N1596 | C6A | 2N2324 | 2N2346 | 2N6238 | C106A1 | 2N1772 | | C122A | C15A |
| 200 | 2N881 | 2N5064 | 2N1597 | C6B | 2N2326 | 2N2348 | 2N6239 | C106B1 | 2N1774 | 2N4442T | C122B | C15B |
| 300 | | | 2N1598 | C6C | 2N2328 | | | C106C1 | 2N1776 | | C122C | C15C |
| 400 | | | 2N1599 | C6D | 2N2329 | | 2N6240 | C106D1 | 2N1777 | 2N4443T | C122D | C15D |
| 500 | | | | | | | | C106E1 | 2N1778 | | C122E | C15E |
| 600 | | | | | | | 2N6241 | C106M1 | 2N2619 | 2N4444T | C122M | C15M |
| IGT (MA) | .2 | .2 | 10 | 1 | .2 | .2 | .2 | .2 | 15 | 30 | 25 | 25 |
| VGT | .8 | .8 | 3 | .8 | .8 | .8 | 1 | .8 | 2 | 1.5 | 1.5 | 2.5 |
| CASE TYPE | T018 | T092 | T039 | T039 | T039 | T039 | T0126 | T0202 | T064 | T0220 | T0220 | T064 |

IO AVERAGE RECTIFIED FORWARD CURRENT (AMPERES)

| 30 | 35 | 35 | 40 | 100 | 100 | 160 |
|--------|--------|--------|---------|--------|---------|--------|
| IN3659 | IN1183 | | IN1183A | | | IN3260 |
| IN3660 | IN1184 | | IN1184A | | | IN3261 |
| | IN1185 | | IN1185A | | | |
| IN3661 | IN1186 | | IN1186A | IN3289 | IN3289A | IN3263 |
| | IN1187 | | IN1187A | IN3290 | IN3290A | IN3265 |
| IN3663 | IN1188 | | IN1188A | IN3291 | IN3291A | IN3267 |
| | IN1189 | | IN1189A | IN3292 | IN3292A | IN3268 |
| | IN1190 | | IN1190A | IN3293 | IN3293A | IN3269 |
| | | IN3765 | | | | IN3270 |
| | | IN3766 | | IN3294 | IN3294A | IN3271 |
| | | IN3767 | | | | IN3272 |
| | | IN3768 | | IN3295 | IN3295A | IN3273 |
| | | | | IN3296 | IN3296A | IN3274 |
| 400 | 500 | 500 | 800 | 1600 | 2300 | 2000 |
| 1.2 | 1.7 | 1.8 | 1.2 | 1.5 | 1.25 | 1.6 |
| D04 | D05 | D05 | D05 | D08 | D08 | D09 |



All Outline Drawings Conform to JEDEC and EIA Specifications



CONTINUED NEXT PAGE

SILICON CONTROLLED RECTIFIERS

ON-STATE (RMS) CURRENT AMPERES

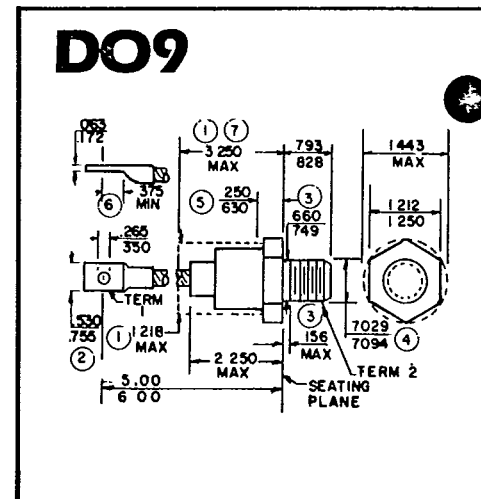
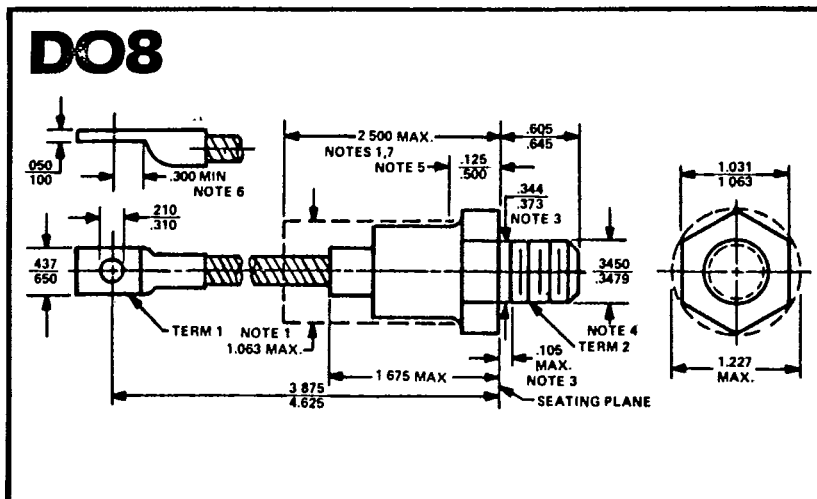
| VDRM VRRM | 8 | 10 | 12 | 16 | 16 | 20 | 25 | 25 | 35 | 35 | 35 | 35 |
|--------------|--------|-------|--------|--------|--------|--------|-------|------|--------|--------|------|------|
| 25 | 2N4167 | C220U | | | 2N1842 | | 2N681 | C37U | | | C35U | C38U |
| 50 | 2N4168 | C220F | 2N6394 | 2N6400 | 2N1843 | 2N5164 | 2N682 | C37F | | | C35F | C38F |
| 100 | 2N4169 | C220A | 2N6395 | 2N6401 | 2N1844 | | 2N683 | C37A | 2N3870 | | C35A | C38A |
| 200 | 2N4170 | C220B | 2N6396 | 2N6402 | 2N1846 | 2N5165 | 2N685 | C37B | 2N3871 | | C35B | C38B |
| 300 | 2N4171 | C220C | | | 2N1848 | | 2N687 | C37C | | | C35C | C38C |
| 400 | 2N4172 | C220D | 2N6397 | 2N6403 | 2N1849 | 2N5166 | 2N688 | C37D | 2N3872 | | C35D | C38D |
| 500 | 2N4173 | C220E | | | 2N1850 | | 2N689 | C37E | | | C35E | C38E |
| 600 | 2N4174 | C220M | 2N6398 | 2N6404 | | 2N5167 | 2N690 | C37M | 2N3873 | 2N5204 | C35M | |
| 700 | | | | | | | 2N691 | C37S | | | C35S | |
| 800 | | | | | | | 2N692 | C37N | | 2N5205 | | |
| 900 | | | | | | | | | | 2N5206 | | |
| 1000 | | | | | | | | | | | | |
| 1100 | | | | | | | | | | 2N5207 | | |
| 1200 | | | | | | | | | | 40 | 40 | 40 |
| IGT (MA) | 30 | 25 | 30 | 30 | 80 | 25 | 25 | 80 | 40 | 3 | 3 | 3 |
| VGT | 1.5 | .2 | 1.5 | 1.5 | 2 | 2.5 | 3 | 3.5 | 3 | | | |
| CASE TYPE | T064 | T048 | T0220 | T0220 | T048 | T048 | T048 | T048 | T0203 | T048 | T048 | T048 |

SILICON CONTROLLED RECTIFIERS CONTINUED NEXT PAGE

ON-STATE (RMS) CURRENT AMPERES

| VDRM VRRM | 35 | 63 | 80 | 80 | 110 | 110 | 110 | 110 | 110 | 110 | 190 | 400 |
|--------------|--------|--------|-------|-------|--------|--------|--------|--------|------|------|--------|--------|
| 25 | C137U | C147U | C45U | C46U | 2N1909 | C52U | C150U | C152U | C60U | C62U | | |
| 50 | C137F | C147F | C45F | C46F | 2N1910 | 2N1792 | C150F | C152F | C60F | C62F | | |
| 100 | C137A | C147A | C45A | C46A | 2N1911 | 2N1793 | C150A | C152A | C60A | C62A | | C380A |
| 200 | C137B | C147B | C45B | C46B | 2N1913 | 2N1795 | C150B | C152C | C60B | C62B | | C380B |
| 300 | C137C | C147C | C45C | C46C | 2N1915 | 2N1797 | C150C | C152C | C60C | C62C | | C380C |
| 400 | C137D | C147D | C45D | C46D | 2N1916 | 2N1798 | C150D | C152D | C60D | C62D | | C380D |
| 500 | C137E | C147E | C45E | C46E | C50E | C52E | C150E | C152E | C60E | C62E | C350E | C380E |
| 600 | C137M | C147M | C45M | C46M | C50M | C52M | C150M | C152M | | | C350M | C380M |
| 700 | C137S | C147S | C45S | C46S | C50S | C52S | C150S | C152S | | | C350S | C380S |
| 800 | C137N | C147N | C45N | C46N | C50N | C52N | C150N | C152N | | | C350N | C380N |
| 900 | C137T | C147T | C45T | C46T | C50T | C52T | C150T | C152T | | | C350T | C380T |
| 1000 | C137P | C147P | C45P | C46P | C50P | C52P | C150P | C152P | | | C350P | C380P |
| 1100 | C137PA | C147PA | C45PA | C46PA | C50PA | C52PA | C150PA | C152PA | | | C350PA | C380PA |
| 1200 | C137PB | C147PB | C45PB | C46PB | C50PB | C52PB | C150PB | C152PB | | | C350PB | C380PB |
| 1300 | | C147PC | | | | | C150PC | C152PC | | | C350PC | C380PC |
| IGT (MA) | 40 | 150 | 75 | 75 | 75 | 75 | 150 | 150 | 75 | 75 | 150 | 150 |
| VGT (V) | 3 | 3.5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| CASE TYPE | T048 | T065 | T083 | T094 | T094 | T083 | T094 | T083 | T094 | T083 | HP1 | HP1 |

PHYSICAL DIMENSIONS

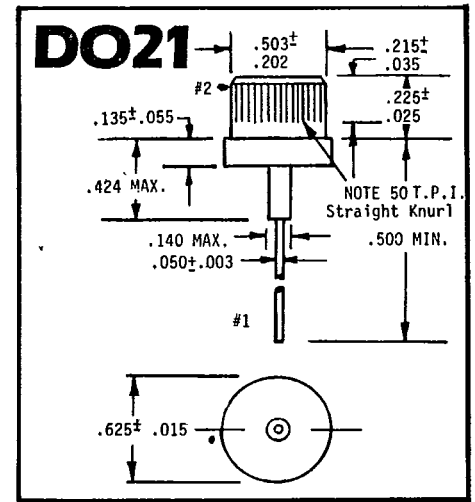


TRIACS

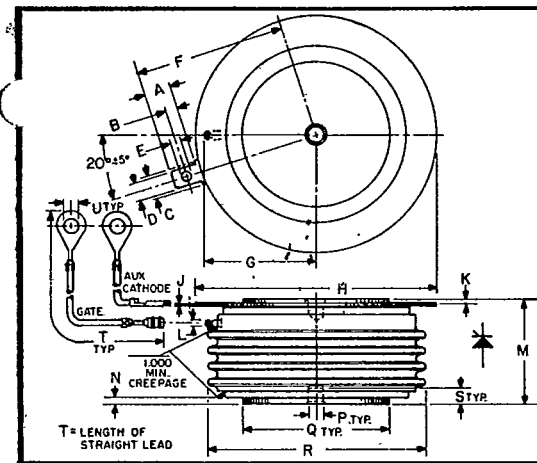
ON-STATE (RMS) CURRENT AMPERES

| VDRM VRRM | 2.5 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 |
|--------------|--------|--------|--------|--------|--------|--------|-----------|----------|----------|---------|--------|--------|
| 25 | | | | | | | | | | | | |
| 50 | T2303F | | | | | | | MAC220-2 | MAC221-2 | | | |
| 100 | 2N5724 | T2500A | SC140A | SC141A | T2801A | | | MAC220-3 | MAC221-3 | TIC226A | T2800A | T2802A |
| 200 | 2N5755 | T2500B | SC140B | SC141B | T2801B | SC240B | SC241B | 2N6342 | 2N6346 | TIC226B | T2800B | T2802B |
| 300 | | T2500C | SC140C | SC141C | T2801C | SC240C | SC241C | MAC220-5 | MAC221-5 | TIC226C | T2800C | T2802C |
| 400 | 2N5756 | T2500D | SC140D | SC141D | T2801D | SC240D | SC241D | 2N6343 | 2N6347 | TIC226D | T2800D | T2802D |
| 500 | | T2500E | SC140E | SC141E | T2801E | SC240E | SC241E | MAC220-7 | MAC221-7 | TIC226E | T2800E | T2802E |
| 600 | 2N5757 | T2500M | SC140M | SC141M | T2801M | SC240M | SC241M | 2N6344 | 2N6348 | TIC226M | T2800M | T2802M |
| 700 | | T2500S | SC140S | SC141S | T2801S | SC240S | SC241S | MAC220-9 | MAC221-9 | TIC226S | T2800S | T2802S |
| 800 | | T2500N | SC140N | SC141N | T2801N | SC240N | SC241N | 2N6345 | 2N6349 | TIC226N | T2800N | T2802N |
| IGT(MA) | 25 | 25 | 50 | 50 | 80 | 50 | 50 | 50 | 50 | 50 | 25 | 50 |
| CASE | T039 | T0220 | T0220 | T0220 | T0220 | T048 | PRESS FIT | T0220 | T0220 | T0220 | T0220 | T0220 |

| VDRM VRRM | 800 | 800 | 900 | 980 | 1000 | 1000 |
|---------------------|----------|----------|-----------|-----------|----------|----------|
| 100 | | | C390AX500 | C390AX550 | | |
| 200 | C390B | | C390BX500 | C390BX550 | | |
| 300 | C390C | | C390CX500 | C390CX550 | | |
| 400 | C390D | | C390DX500 | C390DX550 | | |
| 500 | C390E | | C390EX500 | | C430E | |
| 600 | C390M | | C390MX500 | | C430M | |
| 700 | C390S | | | | C430S | |
| 800 | C390N | | | | C430N | |
| 900 | C390T | | | | C430T | |
| 1000 | C390P | | | | C430P | |
| 1100 | C390PA | | | | C430PA | |
| 1200 | C390PB | | | | C430PB | |
| 1300 | C390PC | C391PC | | | C430PC | C431PC |
| 1400 | | C391PD | | | | C431PD |
| 1500 | | C391PE | | | | C431PE |
| 1600 | | C391PM | | | | C431PM |
| 1700 | | C391PS | | | | C431PS |
| 1800 | | C391PN | | | | C431PN |
| IGT (MA) VGT (V) | 150 5 | 150 5 | 150 5 | 150 5 | 150 5 | 150 5 |
| | HP2 | HP2 | HP2 | HP2 | HP3 | HP3 |



All Outline Drawings Conform to JEDEC and EIA Specifications



HP1 TABLE OF DIMENSIONS
Conversion Table

| SYM | DECIMAL INCHES | | METRIC MM | |
|-----|----------------|-------|-----------|--------|
| | MIN. | MAX. | MIN. | MAX. |
| A | .240 | .260 | 6.223 | 6.604 |
| B | .110 | .140 | 3.048 | 3.556 |
| C | .245 | — | 6.223 | — |
| D | .186 | .199 | 4.724 | 4.801 |
| E | .060 | .075 | 1.524 | 1.905 |
| F | — | 1.125 | — | 28.550 |
| G | — | .865 | — | 21.946 |
| H | 1.600 | 1.656 | 40.640 | 42.06 |
| J | .011 | .019 | 2.794 | 3.483 |
| K | .030 | .060 | .762 | 1.524 |
| L | .056 | .060 | 1.422 | 1.524 |
| M | .515 | .565 | 13.081 | 14.351 |
| N | .030 | .060 | .762 | 1.524 |
| P | .135 | .150 | 3.429 | 3.810 |
| Q | .740 | .760 | 18.897 | 19.101 |
| R | — | 1.460 | — | 37.080 |
| S | .067 | .083 | 1.701 | 2.108 |
| T | 7.980 | — | 202.900 | — |
| U | .137 | .153 | 3.479 | 3.886 |

HP2 TABLE OF DIMENSIONS
Conversion Table

| SYM | DECIMAL INCHES | | METRIC MM | |
|-----|----------------|-------|-----------|--------|
| | MIN. | MAX. | MIN. | MAX. |
| A | .240 | .260 | 6.096 | 6.604 |
| B | .110 | .140 | 2.794 | 3.302 |
| C | .245 | — | 6.223 | — |
| D | .186 | .191 | 4.724 | 4.851 |
| E | .060 | .075 | 1.524 | 1.905 |
| F | — | 1.430 | — | 36.320 |
| G | — | 1.065 | — | 27.051 |
| H | 2.200 | 2.500 | 55.880 | 63.500 |
| J | .011 | .019 | 2.794 | 3.483 |
| K | .030 | .130 | .762 | 3.302 |
| L | .056 | .060 | 1.422 | 1.524 |
| M | 1.000 | 1.070 | 25.400 | 27.180 |
| N | .030 | .130 | .762 | 3.302 |
| P | .130 | .150 | 3.302 | 3.810 |
| Q | 1.300 | 1.345 | 33.02 | 34.160 |
| R | — | 2.150 | — | 54.61 |
| S | .067 | .803 | 1.702 | 2.110 |
| T | 12.200 | — | 309.900 | — |
| U | .137 | .153 | 3.480 | 3.886 |

HP3 TABLE OF DIMENSIONS
Conversion Table

| SYM | DECIMAL INCHES | | METRIC MM | |
|-----|----------------|-------|-----------|--------|
| | MIN. | MAX. | MIN. | MAX. |
| A | .240 | .260 | 6.096 | 6.604 |
| B | .110 | .140 | 2.794 | 3.302 |
| C | .245 | — | 6.223 | — |
| D | .186 | .191 | 4.724 | 4.851 |
| E | .060 | .075 | 1.524 | 1.905 |
| F | — | 1.740 | — | 44.200 |
| G | — | 1.350 | — | 34.29 |
| H | — | 2.960 | — | 75.18 |
| J | .017 | .023 | .430 | .570 |
| K | .050 | .130 | 1.270 | 3.302 |
| L | .057 | .060 | 1.422 | 1.524 |
| M | 1.000 | 1.070 | 25.400 | 27.180 |
| N | .050 | .130 | 1.270 | 3.302 |
| P | .135 | .150 | 3.429 | 3.810 |
| Q | 1.700 | 1.900 | 43.180 | 48.260 |
| R | — | 2.650 | — | 67.31 |
| S | .070 | .100 | 1.770 | 2.540 |
| T | 12.200 | — | 309.900 | — |
| U | .137 | .153 | 3.480 | 3.886 |

TRIACS

| 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 15 | 15 | 15 | 25 | 30 | 30 | 40 |
|--------|--------|--------------------|--------------------|------------------|---------|---------|--------|--------------------|--------|------------------|--------------------|--------|------------------|--------|
| SC143B | SC146B | SC246B | SC245B | T4121B | 2N6342A | 2N6346A | SC149B | SC251B | SC250B | T4120B | SC260B | 2N6160 | 2N6163 | 2N5444 |
| SC143C | SC146C | SC246C | SC245C | T4121C | | | SC149C | SC251C | SC250C | T4120C | SC260C | | | |
| SC143D | SC146D | SC246D | SC245D | T4121D | 2N6343A | 2N6347A | SC149D | SC251D | SC250D | T4120D | SC260D | 2N6161 | 2N6164 | 2N5445 |
| SC143E | SC146E | SC246E | SC245E | T4121E | | | SC149E | SC251E | SC250E | T4120E | SC260E | | | |
| SC143M | SC146M | SC246M | SC245M | T4121M | 2N6344A | 2N6348A | SC149M | SC251M | SC250M | T4120M | SC260M | 2N6162 | 2N6165 | 2N5446 |
| SC143S | SC146S | SC246S | SC245S | | | | SC149S | SC251S | SC250S | T4120S | SC260S | | | |
| SC143N | SC146N | SC246N | SC245N | | 2N6345A | 2N6349A | SC149N | SC251N | SC250N | T4120N | | | | |
| 50 | 50 | 50 | 50 | 100 | 50 | 50 | 50 | 100 | 100 | 100 | 50 | 70 | 70 | 70 |
| T0220 | T0220 | Consult Factory | Consult Factory | T048 ISOLATED | T0220 | T0220 | T022 | Consult Factory | T048 | T048 ISOLATED | Consult Factory | T048 | T048 ISOLATED | T048 |