

 ELECTRICAL CHARACTERISTICS

| Part No.    | Varistor Voltage     | Maximum Allowable Voltage |           | Maximum Clamping Voltage | Withstanding Surge Current          |                                   | Rated Wattage | Energy               | Typical Capacitance |
|-------------|----------------------|---------------------------|-----------|--------------------------|-------------------------------------|-----------------------------------|---------------|----------------------|---------------------|
|             | V1mA<br>(V)          | AC<br>(V)                 | DC<br>(V) | V50A<br>(V)              | I <sub>max</sub><br>(8/20μs)<br>(A) | In(15 times)<br>(8/20μs)<br>( A ) | ( W )         | (10/1000μs)<br>( J ) | 1kHz<br>(PF)        |
| HEL 14D180K | 18 ( 16 ~ 20 )       | 11                        | 14        | ·38                      | 1000                                | —                                 | 0.1           | 5.7                  | 18000               |
| HEL 14D220K | 22 ( 20 ~ 24 )       | 14                        | 18        | ·43                      | 1000                                | —                                 | 0.1           | 7                    | 15000               |
| HEL 14D270K | 27 ( 24 ~ 30 )       | 17                        | 22        | ·53                      | 1000                                | —                                 | 0.1           | 8.5                  | 10000               |
| HEL 14D330K | 33 ( 30 ~ 36 )       | 20                        | 26        | ·65                      | 1000                                | —                                 | 0.1           | 10                   | 8500                |
| HEL 14D390K | 39 ( 35 ~ 43 )       | 25                        | 31        | ·77                      | 1000                                | —                                 | 0.1           | 12                   | 7500                |
| HEL 14D470K | 47 ( 42 ~ 52 )       | 30                        | 38        | ·93                      | 1000                                | —                                 | 0.1           | 15                   | 6500                |
| HEL 14D560K | 56 ( 50 ~ 62 )       | 35                        | 45        | ·110                     | 1000                                | —                                 | 0.1           | 18                   | 5600                |
| HEL 14D680K | 68 ( 61 ~ 75 )       | 40                        | 56        | ·135                     | 1000                                | —                                 | 0.1           | 21                   | 4700                |
| HEL 14D820K | 82 ( 74 ~ 90 )       | 50                        | 65        | 135                      | 4500                                | 3,000                             | 0.6           | 26                   | 3900                |
| HEL 14D101K | 100 ( 90 ~ 110 )     | 60                        | 85        | 165                      | 4500                                | 3,000                             | 0.6           | 32                   | 3400                |
| HEL 14D121K | 120 ( 108 ~ 132 )    | 75                        | 100       | 200                      | 4500                                | 3,000                             | 0.6           | 38                   | 3100                |
| HEL 14D151K | 150 ( 135 ~ 165 )    | 95                        | 125       | 250                      | 4500                                | 3,000                             | 0.6           | 47                   | 3000                |
| HEL 14D181K | 180 ( 162 ~ 198 )    | 115                       | 150       | 300                      | 4500                                | 3,000                             | 0.6           | 57                   | 1030                |
| HEL 14D201K | 200 ( 185 ~ 225 )    | 130                       | 170       | 340                      | 4500                                | 3,000                             | 0.6           | 63                   | 970                 |
| HEL 14D221K | 220 ( 198 ~ 242 )    | 140                       | 180       | 360                      | 4500                                | 3,000                             | 0.6           | 69                   | 840                 |
| HEL 14D241K | 240 ( 216 ~ 264 )    | 150                       | 200       | 395                      | 4500                                | 3,000                             | 0.6           | 76                   | 710                 |
| HEL 14D271K | 270 ( 243 ~ 297 )    | 175                       | 225       | 455                      | 4500                                | 3,000                             | 0.6           | 85                   | 650                 |
| HEL 14D301K | 300 ( 270 ~ 330 )    | 195                       | 250       | 505                      | 4500                                | 3,000                             | 0.6           | 95                   | 600                 |
| HEL 14D331K | 330 ( 297 ~ 363 )    | 210                       | 275       | 550                      | 4500                                | 3,000                             | 0.6           | 104                  | 550                 |
| HEL 14D361K | 360 ( 324 ~ 396 )    | 230                       | 300       | 595                      | 4500                                | 3,000                             | 0.6           | 113                  | 500                 |
| HEL 14D391K | 390 ( 351 ~ 429 )    | 250                       | 320       | 650                      | 4500                                | 3,000                             | 0.6           | 123                  | 480                 |
| HEL 14D431K | 430 ( 387 ~ 473 )    | 275                       | 350       | 710                      | 4500                                | 3,000                             | 0.6           | 136                  | 440                 |
| HEL 14D471K | 470 ( 423 ~ 517 )    | 300                       | 385       | 775                      | 4500                                | 3,000                             | 0.6           | 148                  | 420                 |
| HEL 14D511K | 510 ( 459 ~ 561 )    | 320                       | 418       | 842                      | 4500                                | 3,000                             | 0.6           | 148                  | 390                 |
| HEL 14D561K | 560 ( 504 ~ 616 )    | 350                       | 460       | 920                      | 4500                                | 3,000                             | 0.6           | 148                  | 360                 |
| HEL 14D621K | 620 ( 558 ~ 682 )    | 385                       | 505       | 1,025                    | 4500                                | 3,000                             | 0.6           | 148                  | 320                 |
| HEL 14D681K | 680 ( 612 ~ 748 )    | 420                       | 560       | 1,120                    | 4500                                | 3,000                             | 0.6           | 148                  | 290                 |
| HEL 14D751K | 750 ( 675 ~ 825 )    | 460                       | 615       | 1,240                    | 4500                                | 3,000                             | 0.6           | 158                  | 260                 |
| HEL 14D911K | 910 ( 819 ~ 1001 )   | 550                       | 745       | 1,500                    | 4500                                | 3,000                             | 0.6           | 191                  | 200                 |
| HEL 14D951K | 950 ( 855 ~ 1045 )   | 580                       | 780       | 1,570                    | 4500                                | 3,000                             | 0.6           | 199                  | 190                 |
| HEL 14D102K | 1000 ( 900 ~ 1100 )  | 625                       | 825       | 1,650                    | 4500                                | 3,000                             | 0.6           | 210                  | 180                 |
| HEL 14D112K | 1100 ( 990 ~ 1210 )  | 680                       | 895       | 1,815                    | 4500                                | 3,000                             | 0.6           | 231                  | 150                 |
| HEL 14D152K | 1500 ( 1350 ~ 1650 ) | 900                       | 1220      | 2,475                    | 4500                                | 3,000                             | 0.6           | 312                  | 140                 |
| HEL 14D182K | 1800 ( 1620 ~ 1980 ) | 1000                      | 1465      | 2,970                    | 4500                                | 3,000                             | 0.6           | 378                  | 120                 |