

# SMD POWER INDUCTOR



## P10DR75 SERIES

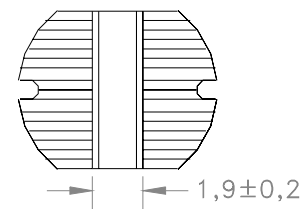
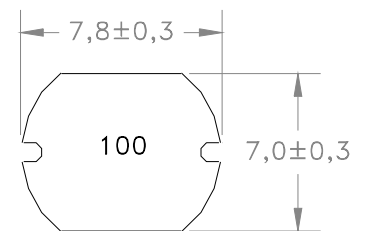


- RoHS Compliant Product
- Inductance measured :  $< 100\mu\text{H}$  : 100KHz,  $0.25V_{\text{RMS}}$
- Inductance measured :  $\geq 100\mu\text{H}$  : 1KHz,  $0.25V_{\text{RMS}}$
- Inductance Tolerance: J= $\pm 5\%$ , K= $\pm 10\%$ , L= $15\pm\%$ , M= $\pm 20\%$   
Add suffix letter for tolerance after the part number
- $I_{\text{RATED}}$ : Max 10% inductance drop and  $\Delta T=40^{\circ}\text{C}$  Temp Rise
- Operating Temperature:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$

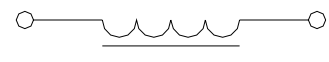
## ELECTRICAL SPECIFICATION @ 25°C

| PART NO  | L<br>$\pm 20\%$<br>( $\mu\text{H}$ ) | DCR<br>Max<br>( $\text{m}\Omega$ ) | RATED<br>$I_{\text{DC}}$<br>(A) |
|----------|--------------------------------------|------------------------------------|---------------------------------|
| P10DR75- |                                      |                                    |                                 |
| 1R0      | 1                                    | 12                                 | 8.00                            |
| 2R2      | 2.2                                  | 15                                 | 5.52                            |
| 3R3      | 3.3                                  | 25                                 | 4.50                            |
| 4R7      | 4.7                                  | 30                                 | 3.30                            |
| 5R6      | 5.6                                  | 35                                 | 2.80                            |
| 6R8      | 6.8                                  | 40                                 | 2.50                            |
| 8R2      | 8.2                                  | 50                                 | 2.40                            |
|          | $\pm 10\%$                           |                                    |                                 |
| 100      | 10                                   | 70                                 | 2.30                            |
| 120      | 12                                   | 80                                 | 2.00                            |
| 150      | 15                                   | 90                                 | 1.80                            |
| 180      | 18                                   | 100                                | 1.60                            |
| 220      | 22                                   | 110                                | 1.50                            |
| 270      | 27                                   | 120                                | 1.30                            |
| 330      | 33                                   | 130                                | 1.20                            |
| 390      | 39                                   | 160                                | 1.10                            |
| 470      | 47                                   | 180                                | 1.10                            |
| 560      | 56                                   | 240                                | 0.94                            |
| 680      | 68                                   | 280                                | 0.85                            |
| 820      | 82                                   | 370                                | 0.78                            |
| 101      | 100                                  | 430                                | 0.72                            |
| 121      | 120                                  | 470                                | 0.66                            |
| 151      | 150                                  | 640                                | 0.58                            |
| 181      | 180                                  | 710                                | 0.51                            |
| 221      | 220                                  | 960                                | 0.49                            |
| 271      | 270                                  | 1110                               | 0.42                            |
| 331      | 330                                  | 1260                               | 0.40                            |
| 391      | 390                                  | 1770                               | 0.36                            |
| 471      | 470                                  | 1960                               | 0.34                            |
| 561      | 560                                  | 2200                               | 0.32                            |
| 681      | 680                                  | 2600                               | 0.30                            |
| 821      | 820                                  | 2800                               | 0.28                            |
| 102      | 1000                                 | 3600                               | 0.23                            |

## Mechanical



## Schematic



### Dimensions

Unless otherwise specified, all tolerances are:  
 inch: .XX :  $\pm 0.015$  .XXX :  $\pm 0.004$   
 mm: X,X :  $\pm 0,38$  X,XX :  $\pm 0,10$

P10DR75-XX  
0602JW

Product performance is limited to specified parameter. Data is subject to change without prior notice.

2463 208th, Ste. 205  
Torrance, CA 90501

Phone: (310)533-1455  
Fax: (310)533-1853

<http://www.mpsind.com>  
Email: [sales@mpsind.com](mailto:sales@mpsind.com)