

## SURFACE-MOUNT POWER INDUCTORS

### FEATURES:

- Ferrite Core Structure
- Low DC Resistance
- Large current up to 3.4A
- Excellent Mechanical Strength
- High Reliability and Excellent Solderability
- Low and square Profile
- High heat resistance

### COMMON APPLICATIONS:

- VCRs, Notebook, DC/DC Converters
- Video Digital Cameras
- Communication System
- Automotive Systems Power supplier
- LCD PDP Televisions
- Hard Disk Drives, Topset, XDSL
- Network Systems
- Computer Peripheral Equipment

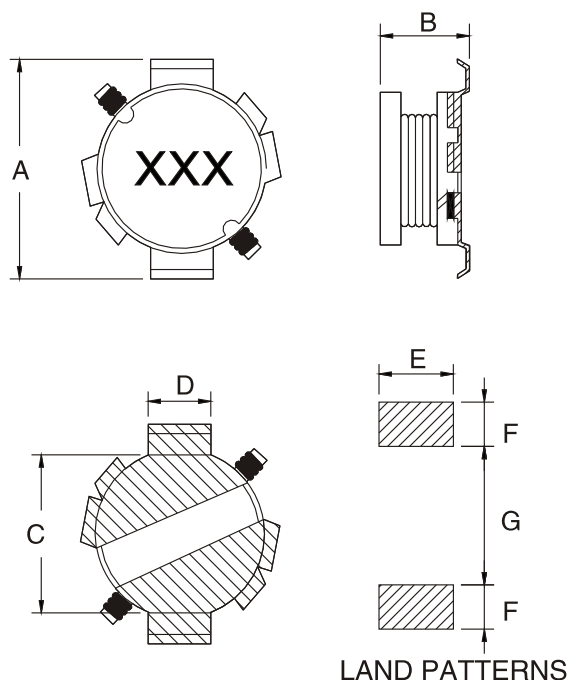


### ELECTRICAL CHARACTERISTICS:

| Part Number  | L<br>$\mu$ H | Test Freq<br>KHz | DCR<br>$\Omega$<br>Max | IDC<br>Max<br>A |
|--------------|--------------|------------------|------------------------|-----------------|
| PRS6020-1R2M | 1.2          | 100              | 0.02                   | 3.40            |
| PRS6020-1R5M | 1.5          | 100              | 0.03                   | 3.10            |
| PRS6020-2R4M | 2.4          | 100              | 0.04                   | 2.40            |
| PRS6020-3R3M | 3.3          | 100              | 0.05                   | 2.20            |
| PRS6020-4R7M | 4.7          | 100              | 0.07                   | 1.80            |
| PRS6020-6R8M | 6.8          | 100              | 0.10                   | 1.60            |
| PRS6020-100M | 10           | 100              | 0.14                   | 1.30            |
| PRS6020-120M | 12           | 100              | 0.18                   | 1.20            |
| PRS6020-150M | 15           | 100              | 0.20                   | 1.00            |
| PRS6020-180M | 18           | 100              | 0.24                   | 0.95            |
| PRS6020-220M | 22           | 100              | 0.27                   | 0.90            |
| PRS6020-270M | 27           | 100              | 0.37                   | 0.75            |
| PRS6020-330M | 33           | 100              | 0.43                   | 0.70            |
| PRS6020-390M | 39           | 100              | 0.47                   | 0.62            |
| PRS6020-470M | 47           | 100              | 0.66                   | 0.56            |
| PRS6020-560M | 56           | 100              | 0.74                   | 0.51            |
| PRS6020-680M | 68           | 100              | 1.01                   | 0.45            |
| PRS6020-820M | 82           | 100              | 1.13                   | 0.43            |
| PRS6020-101K | 100          | 100              | 1.31                   | 0.41            |
| PRS6030-151K | 150          | 100              | 1.9                    | 0.38            |
| PRS6030-181K | 180          | 100              | 2.3                    | 0.35            |
| PRS6030-221K | 220          | 100              | 3.0                    | 0.30            |
| PRS6030-271K | 270          | 100              | 3.5                    | 0.26            |
| PRS6030-331K | 330          | 100              | 4.2                    | 0.23            |
| PRS6030-391K | 390          | 100              | 4.8                    | 0.21            |
| PRS6030-471K | 470          | 100              | 5.7                    | 0.19            |
| PRS6030-561K | 560          | 100              | 6.4                    | 0.18            |
| PRS6030-681K | 680          | 100              | 7.6                    | 0.17            |
| PRS6030-821K | 820          | 100              | 10                     | 0.14            |
| PRS6030-102K | 1000         | 100              | 12                     | 0.13            |
| PRS6030-122K | 1200         | 100              | 16                     | 0.11            |
| PRS6030-152K | 1500         | 100              | 19                     | 0.10            |
| PRS6030-182K | 1800         | 100              | 28                     | 0.08            |
| PRS6030-222K | 2200         | 100              | 30                     | 0.075           |
| PRS6030-272K | 2700         | 100              | 36                     | 0.070           |
| PRS6030-332K | 3300         | 100              | 48                     | 0.065           |
| PRS6030-392K | 3900         | 100              | 54                     | 0.055           |
| PRS6030-472K | 4700         | 100              | 63                     | 0.050           |
| PRS6030-562K | 5600         | 100              | 72                     | 0.048           |

Note: 1. K=  $\pm$  10%, M=  $\pm$  20%, N=  $\pm$  30%

### CHARACTERISTICS:



LAND PATTERNS

DIMENSIONS IN: mm

| Part Number | A      | B      | C   | D   | E   | F   | G   |
|-------------|--------|--------|-----|-----|-----|-----|-----|
| PRS6020     | 7.3Max | 2.9Max | 5.0 | 2.0 | 3.0 | 2.0 | 4.4 |
| PRS6030     | 7.3Max | 3.3Max | 5.0 | 2.0 | 3.0 | 2.0 | 4.4 |

### TECHNICAL INFORMATION:

- Inductor Testing: HP4284A (Equivalent acceptable)  
DCR: QuadTech 1880 Milliohm meter  
Q- HP4342A - SRF-HP4191A  
IDCMax current is decreased 10% against its initial value
- Operating temperature: -40°C to +105°C
- Storage Temperature: -40°C to +105°C
- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat: 260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance

Note: All specifications subject to change without notice.

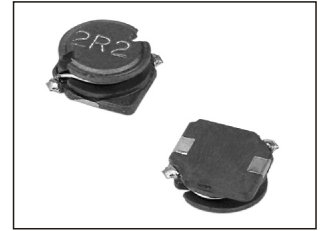
## POWER SURFACE-MOUNT WIRE-WOUND CHIP INDUCTORS

### FEATURES:

- Magnetically Shielded Structure
- Low DC Resistance
- Large current up to 3.8A
- Excellent Mechanical Strength
- High Reliability and Excellent Solderability
- Low and square Profile
- High heat resistance

### COMMON APPLICATIONS:

- VCRs, Notebook, DC/DC Converters
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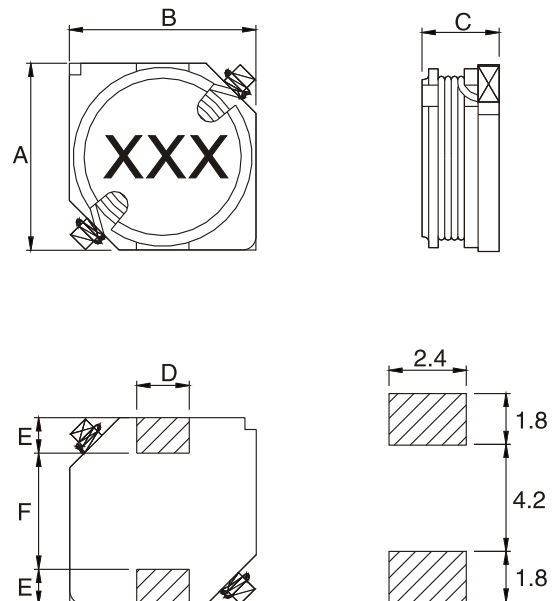


### ELECTRICAL CHARACTERISTICS:

| Part Number  | L<br>$\mu$ H<br>(100KHz) | Q<br>Typ | Test<br>Freq<br>Mhz | DCR<br>$\Omega$<br>Max | IDC<br>Max<br>A |
|--------------|--------------------------|----------|---------------------|------------------------|-----------------|
| PRS7030-1R0M | 1.0                      | 18       | 7.96                | 0.022                  | 3.00            |
| PRS7030-1R5M | 1.5                      | 17       | 7.96                | 0.027                  | 2.75            |
| PRS7030-2R2M | 2.2                      | 17       | 7.96                | 0.030                  | 2.60            |
| PRS7030-3R5M | 3.5                      | 17       | 7.96                | 0.038                  | 2.20            |
| PRS7030-4R7M | 4.7                      | 14       | 7.96                | 0.048                  | 1.85            |
| PRS7030-6R2M | 6.2                      | 17       | 7.96                | 0.058                  | 1.65            |
| PRS7030-100M | 10.0                     | 16       | 2.52                | 0.075                  | 1.50            |
| PRS7030-150M | 15.0                     | 14       | 2.52                | 0.115                  | 1.20            |
| PRS7030-220M | 22.0                     | 14       | 2.52                | 0.160                  | 1.02            |
| PRS7030-330M | 33.0                     | 13       | 2.52                | 0.230                  | 0.85            |
| PRS7030-470K | 47.0                     | 12       | 2.52                | 0.340                  | 0.70            |
| PRS7030-680K | 68.0                     | 12       | 2.52                | 0.480                  | 0.58            |
| PRS7030-101K | 100.0                    | 18       | 0.796               | 0.720                  | 0.46            |
| PRS7030-151K | 150.0                    | 18       | 0.796               | 0.920                  | 0.40            |
| PRS7030-221K | 220.0                    | 23       | 0.796               | 1.600                  | 0.32            |
| PRS7030-331K | 330.0                    | 24       | 0.796               | 2.200                  | 0.26            |
| PRS7030-471K | 470.0                    | 30       | 0.796               | 2.800                  | 0.22            |
| PRS7030-681K | 680.0                    | 28       | 0.796               | 4.350                  | 0.18            |
| PRS7030-102K | 1000.0                   | 66       | 0.796               | 6.200                  | 0.15            |
| PRS7045-1R0M | 1.0                      | 25       | 7.96                | 0.022                  | 3.80            |
| PRS7045-1R5M | 1.5                      | 26       | 7.96                | 0.027                  | 3.50            |
| PRS7045-2R2M | 2.2                      | 24       | 7.96                | 0.032                  | 3.30            |
| PRS7045-3R3M | 3.3                      | 23       | 7.96                | 0.036                  | 2.80            |
| PRS7045-4R7M | 4.7                      | 23       | 7.96                | 0.042                  | 2.60            |
| PRS7045-6R8M | 6.8                      | 22       | 7.96                | 0.054                  | 2.25            |
| PRS7045-100M | 10.0                     | 28       | 2.52                | 0.070                  | 2.00            |
| PRS7045-150M | 15.0                     | 24       | 2.52                | 0.086                  | 1.60            |
| PRS7045-220M | 22.0                     | 26       | 2.52                | 0.125                  | 1.40            |
| PRS7045-330M | 33.0                     | 20       | 2.52                | 0.150                  | 1.22            |
| PRS7045-470K | 47.0                     | 21       | 2.52                | 0.230                  | 1.00            |
| PRS7045-680K | 68.0                     | 17       | 2.52                | 0.280                  | 0.90            |
| PRS7045-101K | 100.0                    | 17       | 0.796               | 0.430                  | 0.75            |
| PRS7045-151K | 150.0                    | 17       | 0.796               | 0.580                  | 0.62            |
| PRS7045-221K | 220.0                    | 22       | 0.796               | 0.930                  | 0.50            |
| PRS7045-331K | 330.0                    | 20       | 0.796               | 1.240                  | 0.42            |
| PRS7045-471K | 470.0                    | 20       | 0.796               | 1.850                  | 0.34            |
| PRS7045-681K | 680.0                    | 18       | 0.796               | 2.400                  | 0.30            |
| PRS7045-102K | 1000.0                   | 48       | 0.252               | 4.000                  | 0.22            |

Note: 1. K=  $\pm 10\%$ , M=  $\pm 20\%$ , N=  $\pm 30\%$

### CHARACTERISTICS:



DIMENSIONS IN: mm

| Part Number | A             | B             | C             | D   | E   | F   |
|-------------|---------------|---------------|---------------|-----|-----|-----|
| PRS7030     | 7.2 $\pm$ 0.3 | 7.2 $\pm$ 0.3 | 3.0 $\pm$ 0.3 | 2.0 | 1.5 | 4.0 |
| PRS7045     | 7.0 $\pm$ 0.2 | 7.0 $\pm$ 0.2 | 4.5 $\pm$ 0.3 | 2.0 | 1.5 | 4.0 |

### TECHNICAL INFORMATION:

- Inductor Testing: HP4284A (Equivalent acceptable)
- DCR: QuadTech 1880 Milliohm meter
- Q- HP4342A - SRF-HP4191A
- IDCMax current is decreased 10% against its initial value
- Operating temperature: -40°C to +105°C
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- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat: 260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance
- Note: All specifications subject to change without notice.

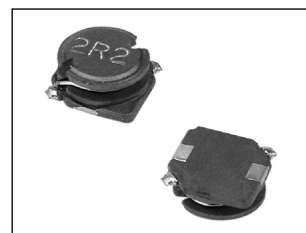
## POWER SURFACE-MOUNT WIRE-WOUND CHIP INDUCTORS

### FEATURES:

- Magnetically Shielded Structure
- Low DC Resistance
- Large current up to 4.8A
- Excellent Mechanical Strength
- High Reliability and Excellent Solderability
- Low and square Profile
- High heat resistance

### COMMON APPLICATIONS:

- VCRs
- Video Cameras
- Communication System
- Automotive Systems
- Liquid Crystal Televisions
- Hard Disk Drives
- Network Systems
- Computer Peripheral Equipment

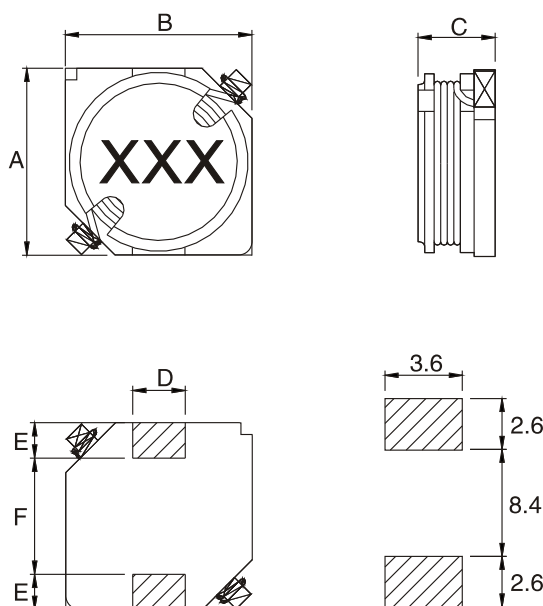


### ELECTRICAL CHARACTERISTICS:

| Part Number  | L<br>μH<br>(100KHz) | Q<br>Typ | Test<br>Freq<br>Mhz | DCR<br>Ω<br>Max | IDC<br>Max<br>A |
|--------------|---------------------|----------|---------------------|-----------------|-----------------|
| PRS1030-2R7M | 2.7                 | 13       | 7.96                | 0.028           | 3.00            |
| PRS1030-4R7M | 4.7                 | 13       | 7.96                | 0.040           | 2.60            |
| PRS1030-6R8M | 6.8                 | 15       | 7.96                | 0.052           | 2.20            |
| PRS1030-100M | 10.0                | 15       | 2.52                | 0.064           | 2.00            |
| PRS1030-150M | 15.0                | 18       | 2.52                | 0.100           | 1.65            |
| PRS1030-220M | 22.0                | 20       | 2.52                | 0.145           | 1.38            |
| PRS1030-330M | 33.0                | 16       | 2.52                | 0.220           | 1.10            |
| PRS1030-470M | 47.0                | 10       | 2.52                | 0.270           | 0.96            |
| PRS1030-680M | 68.0                | 12       | 2.52                | 0.360           | 0.82            |
| PRS1030-101K | 100.0               | 14       | 0.796               | 0.540           | 0.70            |
| PRS1030-151K | 150.0               | 23       | 0.796               | 0.700           | 0.60            |
| PRS1030-221K | 220.0               | 23       | 0.796               | 1.150           | 0.46            |
| PRS1030-331K | 330.0               | 25       | 0.796               | 1.700           | 0.38            |
| PRS1030-471K | 470.0               | 20       | 0.796               | 2.250           | 0.28            |
| PRS1030-681K | 680.0               | 18       | 0.796               | 3.300           | 0.23            |
| PRS1030-102K | 1000.0              | 42       | 0.796               | 4.700           | 0.20            |
| PRS1045-2R7M | 2.7                 | 25       | 7.96                | 0.026           | 4.80            |
| PRS1045-4R5M | 4.5                 | 25       | 7.96                | 0.033           | 4.20            |
| PRS1045-6R8M | 6.8                 | 22       | 7.96                | 0.040           | 3.50            |
| PRS1045-100M | 10.0                | 26       | 2.52                | 0.064           | 3.20            |
| PRS1045-150M | 15.0                | 26       | 2.52                | 0.100           | 2.50            |
| PRS1045-220M | 22.0                | 22       | 2.52                | 0.145           | 2.20            |
| PRS1045-330M | 33.0                | 20       | 2.52                | 0.220           | 1.90            |
| PRS1045-470M | 47.0                | 21       | 2.52                | 0.270           | 1.60            |
| PRS1045-680M | 68.0                | 21       | 2.52                | 0.360           | 1.30            |
| PRS1045-101K | 100.0               | 14       | 0.796               | 0.540           | 1.10            |
| PRS1045-151K | 150.0               | 16       | 0.796               | 0.700           | 0.85            |
| PRS1045-221K | 220.0               | 15       | 0.796               | 1.150           | 0.72            |
| PRS1045-331K | 330.0               | 12       | 0.796               | 1.700           | 0.62            |
| PRS1045-471K | 470.0               | 12       | 0.796               | 2.250           | 0.52            |
| PRS1045-681K | 680.0               | 13       | 0.796               | 3.300           | 0.43            |
| PRS1045-102K | 1000.0              | 25       | 0.252               | 4.700           | 0.38            |

Note: 1. K= ± 10%, M= ± 20%, N= ± 30%

### CHARACTERISTICS:



DIMENSIONS IN: mm

| Part Number | A          | B          | C         | D   | E   | F   |
|-------------|------------|------------|-----------|-----|-----|-----|
| PRS1030     | 10.0 ± 0.3 | 10.0 ± 0.3 | 3.0 ± 0.3 | 2.4 | 2.0 | 6.0 |
| PRS1045     | 10.0 ± 0.2 | 10.0 ± 0.3 | 4.5 ± 0.3 | 2.4 | 2.0 | 6.0 |

### TECHNICAL INFORMATION:

- Inductor Testing: HP4284A (Equivalent acceptable)  
DCR: QuadTech 1880 Milliohm meter  
Q- HP4342A – SRF-HP4191A  
IDCMax current is decreased 10% against its initial value
  - Operating temperature: -40°C to +105°C
  - Storage Temperature: -40°C to +105°C
  - Solder methods: Vapor Phase, Infrared Reflow
  - Resistance to soldering heat: 260°C for 10 seconds
  - Solvent resistance: Conforms to MIL-STD-202E
  - Marking: Inductance & Tolerance
- Note: All specifications subject to change without notice.

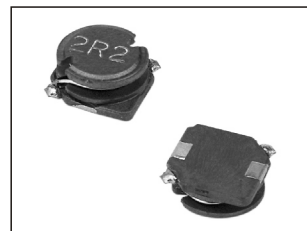
## POWER SURFACE-MOUNT WIRE-WOUND CHIP INDUCTORS

### FEATURES:

- Magnetically Shielded Structure
- Low DC Resistance
- Large current up to 7.2A
- Excellent Mechanical Strength
- High Reliability and Excellent Solderability
- Low and square Profile
- High heat resistance

### COMMON APPLICATIONS:

- VCRs
- Video Cameras
- Communication System
- Automotive Systems
- Liquid Crystal Televisions
- Hard Disk Drives
- Network Systems
- Computer Peripheral Equipment

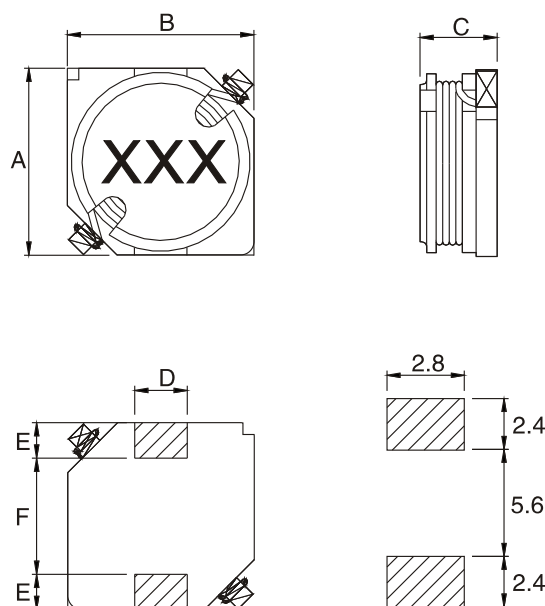


### ELECTRICAL CHARACTERISTICS:

| Part Number  | L<br>μH<br>(100KHz) | Q<br>Typ | Test<br>Freq<br>Mhz | DCR<br>Ω<br>Max | IDC<br>Max<br>A |
|--------------|---------------------|----------|---------------------|-----------------|-----------------|
| PRS1345-2R5M | 2.5                 | 19       | 7.96                | 0.0098          | 7.20            |
| PRS1345-3R5M | 3.5                 | 20       | 7.96                | 0.0105          | 6.00            |
| PRS1345-4R6M | 4.7                 | 18       | 7.96                | 0.0165          | 5.20            |
| PRS1345-6R8M | 6.8                 | 17       | 7.96                | 0.0240          | 4.30            |
| PRS1345-100M | 10.0                | 35       | 2.52                | 0.0370          | 3.60            |
| PRS1345-150M | 15.0                | 28       | 2.52                | 0.0460          | 3.30            |
| PRS1345-220M | 22.0                | 27       | 2.52                | 0.0620          | 2.90            |
| PRS1345-330M | 33.0                | 23       | 2.52                | 0.0850          | 2.50            |
| PRS1345-470M | 47.0                | 24       | 2.52                | 0.1300          | 1.90            |
| PRS1345-680M | 68.0                | 22       | 2.52                | 0.1650          | 1.65            |
| PRS1345-101K | 100.0               | 20       | 0.796               | 0.2550          | 1.40            |
| PRS1345-151K | 150.0               | 17       | 0.796               | 0.3800          | 1.20            |
| PRS1345-221K | 220.0               | 16       | 0.796               | 0.5000          | 1.00            |
| PRS1345-331K | 330.0               | 11       | 0.796               | 0.7000          | 0.85            |
| PRS1345-471K | 470.0               | 14       | 0.796               | 1.1500          | 0.67            |
| PRS1345-681K | 680.0               | 12       | 0.796               | 1.4000          | 0.60            |
| PRS1345-102K | 1000.0              | 41       | 0.252               | 2.3500          | 0.46            |
| PRS1380-100M | 10                  | 20       | 2.52                | 0.036           | 4.050           |
| PRS1380-150M | 15                  | 20       | 2.52                | 0.040           | 3.340           |
| PRS1380-220M | 22                  | 20       | 2.52                | 0.060           | 2.800           |
| PRS1380-330M | 33                  | 20       | 2.52                | 0.080           | 2.400           |
| PRS1380-470M | 47                  | 20       | 2.52                | 0.110           | 2.000           |
| PRS1380-560M | 56                  | 20       | 2.52                | 0.120           | 1.900           |
| PRS1380-680M | 68                  | 20       | 2.52                | 0.150           | 1.800           |
| PRS1380-820M | 82                  | 20       | 2.52                | 0.190           | 1.600           |
| PRS1380-101K | 100                 | 15       | 0.796               | 0.230           | 1.500           |
| PRS1380-121K | 120                 | 15       | 0.796               | 0.320           | 1.400           |
| PRS1380-151K | 150                 | 15       | 0.796               | 0.370           | 1.300           |
| PRS1380-221K | 220                 | 15       | 0.796               | 0.440           | 1.000           |
| PRS1380-331K | 330                 | 15       | 0.796               | 0.600           | 0.900           |
| PRS1380-471K | 470                 | 15       | 0.796               | 0.880           | 0.700           |
| PRS1380-681K | 680                 | 10       | 0.796               | 1.180           | 0.500           |
| PRS1380-102K | 1000                | 10       | 0.252               | 1.740           | 0.480           |
| PRS1380-122K | 1200                | 10       | 0.252               | 1.920           | 0.380           |

Note:1. K= ± 10%,M= ± 20%,N= ± 30%

### CHARACTERISTICS:



DIMENSIONS IN: mm

| Part Number | A          | B          | C         | D   | E   | F   |
|-------------|------------|------------|-----------|-----|-----|-----|
| PRS1345     | 12.7 ± 0.3 | 12.7 ± 0.3 | 4.8 ± 0.5 | 3.0 | 2.0 | 8.6 |
| PRS1380     | 12.7 ± 0.3 | 12.7 ± 0.3 | 8.5 ± 0.5 | 3.0 | 2.0 | 8.6 |

### TECHNICAL INFORMATION:

- Inductor Testing: HP4284A (Equivalent acceptable)
- DCR: QuadTech 1880 Milliohm meter
- Q- HP4342A – SRF-HP4191A
- IDCMax current is decreased 10% against its initial value
- Operating temperature: -40°C to +105°C
- Storage Temperature: -40°C to +105°C
- Solder methods: Vapor Phase, Infrared Reflow
- Resistance to soldering heat: 260°C for 10 seconds
- Solvent resistance: Conforms to MIL-STD-202E
- Marking: Inductance & Tolerance
- Note: All specifications subject to change without notice.