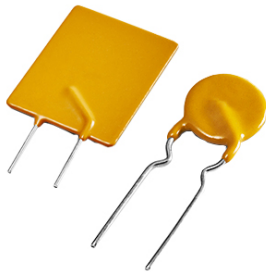


### Features



- Radial leaded devices
- High switching temperature
- Provides maximum working temperature with 125°C
- Faster tripping, typical application in micro-motors for automobiles
- Protecting against overcurrent and overtemperature faults
- Agency Recognition:UL、CSA、TUV is pending

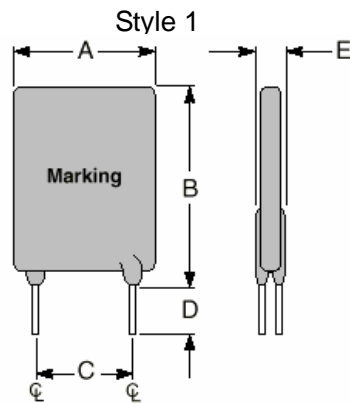
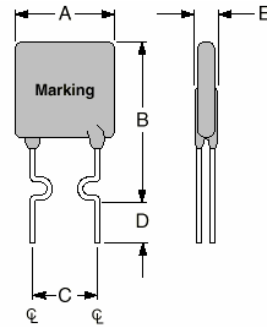
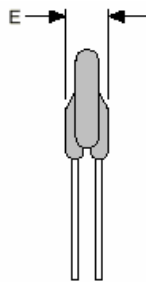
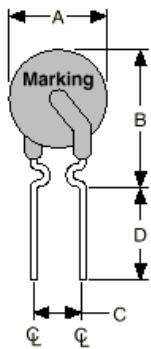


## DWPH30 series

R-line

### Product Dimensions (mm)

| Part number  | A    | B    | C    | D    | E    | Lead    | Style |
|--------------|------|------|------|------|------|---------|-------|
|              | Max. | Max. | Max. | Min. | Max. | Size(φ) |       |
| DWPH30-050F  | 7.4  | 12.7 | 5.8  | 7.6  | 3.3  | 0.5     | 1     |
| DWPH30-070F  | 6.9  | 10.8 | 5.8  | 7.6  | 3.0  | 0.5     | 2     |
| DWPH30-100F  | 9.7  | 13.6 | 5.8  | 7.6  | 3.0  | 0.5     | 1     |
| DWPH30-300F  | 10.2 | 15.5 | 5.8  | 7.6  | 3.8  | 0.8     | 3     |
| DWPH30-500F  | 14.0 | 24.1 | 5.8  | 11.5 | 3.8  | 0.8     | 3     |
| DWPH30-750F  | 21.1 | 24.9 | 10.9 | 7.6  | 3.8  | 0.8     | 3     |
| DWPH30-1000F | 23.5 | 27.9 | 10.9 | 7.6  | 4.0  | 0.8     | 3     |

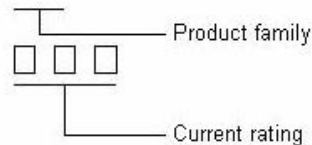


Style 3

Style 2

Marking system

DWPH30



\* Lead materials: Tin-plate metal wire.

\* The right logo is lead-free mark.



## Electrical Characteristic

| Part number  | $I_H$ | $I_T$ | Max. Time-to-trip |      | $V_{max}$ | $I_{max}$ | $Pd_{typ}$ | $R_{min}$    | $R_{1max}$   |
|--------------|-------|-------|-------------------|------|-----------|-----------|------------|--------------|--------------|
|              | (A)   | (A)   | (A)               | (S)  | (V)       | (A)       | (W)        | ( $\Omega$ ) | ( $\Omega$ ) |
| DWPH30-050F  | 0.5   | 1.0   | 2.5               | 3.0  | 32        | 100       | 0.9        | 0.3500       | 1.100        |
| DWPH30-070F  | 0.7   | 1.4   | 3.5               | 3.2  | 32        | 100       | 0.9        | 0.2300       | 0.800        |
| DWPH30-100F  | 1.0   | 1.9   | 5.0               | 6.2  | 32        | 100       | 1.4        | 0.1500       | 0.430        |
| DWPH30-300F  | 3.0   | 6.0   | 15.0              | 5.0  | 32        | 100       | 3.2        | 0.0350       | 0.110        |
| DWPH30-500F  | 5.0   | 10.0  | 25.0              | 9.0  | 32        | 100       | 5.3        | 0.0150       | 0.040        |
| DWPH30-750F  | 7.5   | 15.0  | 37.5              | 13.0 | 32        | 100       | 6.5        | 0.0074       | 0.023        |
| DWPH30-1000F | 10.0  | 20.0  | 50.0              | 15.0 | 32        | 100       | 7.0        | 0.0060       | 0.016        |

$I_H$ =Hold current: maximum current at which the device will not trip at 25°C still air.

$I_T$ =Trip current: minimum current at which the device will always trip at 25°C still air.

$V_{max}$ =Maximum voltage device can withstand without damage at rated current.

$I_{max}$ =Maximum fault current device can withstand without damage at rated voltage.

$Pd_{typ}$ =Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

$R_{min}$ =Minimum device resistance at 25°C prior to tripping.

$R_{1max}$ =Maximum device resistance measured in the nontripped state 1 hour post reflow.

## Test Procedures And Requirements

| Test            | Test Conditions                     | Accept/Reject Criteria        |
|-----------------|-------------------------------------|-------------------------------|
| Resistance      | In still air @ 25°C                 | $R_{min} \leq R \leq R_{max}$ |
| Time to Trip    | Specified current, $V_{max}$ , 25°C | $T \leq$ maximum Time to Trip |
| Hold Current    | 30min, at $I_H$                     | No trip                       |
| Trip Cycle Life | $V_{max}$ , $I_{max}$ , 100cycles   | No arcing or burning          |
| Trip Endurance  | $V_{max}$ , 2hours                  | No arcing or burning          |

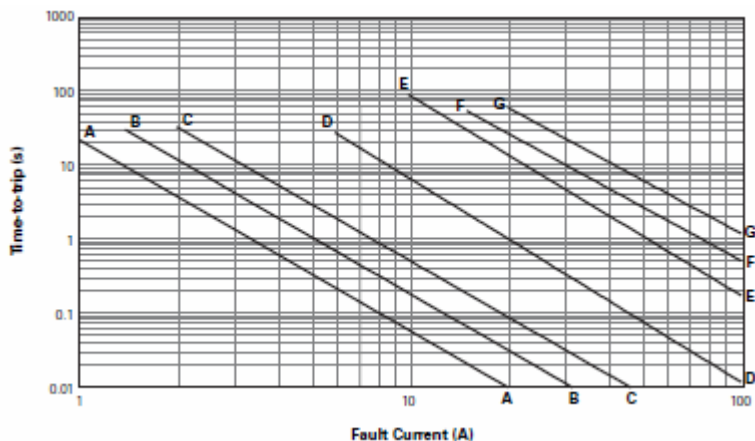
## Thermal Derating Chart- $I_H$ (A)

| Part number  | Maximum ambient operating temperatures(°C) |      |       |      |     |       |      |      |       |     |
|--------------|--|------|-------|------|-----|-------|------|------|-------|-----|
|              | -40  | -20  | 0     | 25   | 40  | 50    | 60   | 70   | 85    | 125 |
| DWPH30-050F  | 0.7  | 0.6  | 0.60  | 0.5  | 0.4 | 0.400 | 0.40 | 0.30 | 0.300 | 0.1 |
| DWPH30-070F  | 1.0  | 0.9  | 0.80  | 0.7  | 0.6 | 0.600 | 0.50 | 0.50 | 0.400 | 0.2 |
| DWPH30-100F  | 1.4  | 1.2  | 1.10  | 1.0  | 0.9 | 0.800 | 0.70 | 0.70 | 0.600 | 0.2 |
| DWPH30-300F  | 4.1  | 3.8  | 3.42  | 3.0  | 2.7 | 2.430 | 2.22 | 1.98 | 1.650 | 0.6 |
| DWPH30-500F  | 6.8  | 6.3  | 5.70  | 5.0  | 4.5 | 4.050 | 3.70 | 3.30 | 2.750 | 1.0 |
| DWPH30-750F  | 10.2                                       | 9.4  | 8.55  | 7.5  | 6.7 | 6.075 | 5.55 | 4.95 | 4.125 | 1.5 |
| DWPH30-1000F | 13.6                                       | 12.5 | 11.40 | 10.0 | 8.9 | 8.100 | 7.40 | 6.60 | 5.500 | 2.0 |

## Typical Time-to-trip Curves at 25°C

## DWPH30Series

- A:DWPH30-050F
- B:DWPH30-070F
- C:DWPH30-100F
- D:DWPH30-300F
- E:DWPH30-500F
- F:DWPH30-750F
- G: DWPH30-1000F



## Packaging and Marking Information

Bulk: DWPH30-050F~ DWPH30-300F.....500pcs per bag  
DWPH30-500F~ DWPH30-1000F..... 250pcs per bag