## Polymer PTC Devices Surface mount fuses

## Features

－Surface mount devices
－Withstanding high interrupt voltage
－Agency Recognition：UL
－Lead－free and compliant with the European Union RoHS Directive（EU）2015／863

## Product Dimensions（mm）

| Part number | A |  | B |  | C |  | D |  |  | E |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Min． | Max． | Min． | Max． | Min． | Max． | Min． | Max． | Min． | Max． |  |
| DW080AF | 6.7 | 7.9 | 2.7 | 3.7 | 4.8 | 5.3 | 0.2 | 0.4 | 2.5 | 3.1 |  |

C


## Electrical Characteristics

| Part number | IH | It | Ttrip |  | $V_{\text {max interrupt }}$ | $I_{\text {max }}$ | Pd typ | $\mathbf{R}_{\text {min }}$ | $\mathbf{R}_{\text {max }}$ | $\mathbf{R 1 m a x}^{\text {max }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | （A） | （A） | Current（A） | Time（S） | （V） | （A） | （W） | （ $\Omega$ ） | （ $\Omega$ ） | （ $\Omega$ ） |
| DW080AF | 0.080 | 0.160 | 1.00 | 0.80 | 250 | 3.0 | 1.00 | 14.0 | 22.0 | 40.0 |

$\mathbf{I}_{\mathbf{H}}=$ Hold current：maximum current at which the device will not trip at $25^{\circ} \mathrm{C}$ still air．
$\mathbf{I T}_{\mathbf{T}}=$ Trip current：minimum current at which the device will always trip at $25^{\circ} \mathrm{C}$ still air．
$\mathrm{T}_{\text {trip }}=$ Typical time to trip（s）at assigned current．
$\mathbf{V}_{\text {max }}$ interrupt＝Maximum interrupt voltage device can withstand without damage at rated current．
$I_{\text {max }}=$ Maximum fault current device can withstand without damage at rated voltage．
$\mathbf{P d}_{\text {typ }}=$ Typical power dissipation：typical amount of power dissipated by the device when in state air environment．
$\mathbf{R}_{\text {min }}=$ Minimum device resistance at $25^{\circ} \mathrm{C}$ prior to tripping．
$\mathbf{R}_{\text {max }}=$ Maximum device resistance at $25^{\circ} \mathrm{C}$ prior to tripping．
$\mathbf{R}_{1 \text { max }}=$ Maximum device resistance at $25^{\circ} \mathrm{C}$ one hour post trip．

## Thermal Derating Chart－IH（A）

| Part number Maximum ambient operating temperatures（ ${ }^{\circ} \mathrm{C}$ ） |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | -40 | -20 | 0 | 25 | 40 | 50 | 60 | 70 | 85 |
| DW080AF | 0.124 | 0.110 | 0.095 | 0.080 | 0.066 | 0.059 | 0.051 | 0.044 | 0.033 |
| Package Information |  |  |  |  |  |  |  |  |  |

Bulk：1000pcs per bag．
Tape \＆Reel：2000pcs per reel．

## Solder Reflow Recommendations



Average Ramp－Up Rate： $3^{\circ} \mathrm{C} /$ second max．
Ramp－Down Rate： $6^{\circ} \mathrm{C}$／second max．
＊Recommended reflow methods：IR，Vapor phase，hot air oven．
＊Devices can be cleaned using standard industry methods and solvents．

## Notes：

－If reflow temperatures exceed the recommended profile，devices may not meet the performance requirements．
－Devices are not designed to be wave soldered to the bottom side of the board．

