## PolySwitch ${ }^{\circledR}$ PTC Devices

Overcurrent Protection Device

## Specification Status: Released

Maximum Electrical Ratings
Operating Voltage / Interrupt Current
$33 V_{D C} / 40 \mathrm{~A}$
$12 \mathrm{~V}_{\mathrm{DC}} / 60 \mathrm{~A}$
$5 V_{D C} / 125 A$
Marking:


Notes:

1. All metal surfaces are tin plated.
2. Devices cannot be wave soldered.
3. Drawing not to scale.

TABLE I. DIMENSIONS:

|  | A |  | B |  | C |  | D |  | E |  | F |  | G |  | $\begin{gathered} \mathrm{H} \\ \mathrm{MIN} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX |  |
| mm : | 8.00 | 9.40 | -- | 3.00 | 6.0 | 6.71 | 0.56 | 0.71 | 0.56 | 0.71 | 3.68 | 3.94 | 0.66 | 1.37 | 0.43 |
| in*: | (0.315) | (0.370) | -- | (0.118) | (0.236) | (0.264) | (0.022) | (0.028) | (0.022) | (0.028) | (0.145) | (0.155) | $\begin{gathered} 0.026 \\ \\ \hline \end{gathered}$ | (0.054) | (0.017) |

TABLE II. PERFORMANCE RATINGS:

| CURRENT RATINGS** |  |  |  |  |  | $\begin{gathered} \hline \text { TIME TO } \\ \text { TRIP** } \end{gathered}$ | RESISTANCE VALUES |  | TRIPPED-STATE <br> POWER <br> DISSIPATION** |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AMPS <br> AT $0^{\circ} \mathrm{C}$ |  | AMPS <br> AT $20^{\circ} \mathrm{C}$ |  | AMPS <br> AT $60^{\circ} \mathrm{C}$ |  | $\begin{gathered} \hline \text { SECONDS AT } \\ 20^{\circ} \mathrm{C}, 8.0 \mathrm{~A} \\ \text { MAX } \\ \hline \end{gathered}$ | OHMS <br> AT $20^{\circ} \mathrm{C}$ |  | WATTS AT |
|  |  | $20^{\circ} \mathrm{C}$ |  |  |  |  |  |
| HOLD | TRIP |  |  | HOLD | TRIP |  | HOLD | TRIP | MIN | MAX* | MAX |
| 1.80 | 3.60 | 1.50 | 3.00 | 0.99 | 1.98 | 5.0 | 0.080 | 0.230 | 1.9 |

* Maximum resistance is measured both 1 hour post reflow and 1 hour post trip.
** Values specified were determined using PCB's with 0.070 "X1.5 ounce copper traces.

Agency Recognition:
Reference Documents:
Precedence:
Effectivity:
CAUTION:

UL, CSA and TÜV
PS300
This specification takes precedence over documents referenced herein.
Reference documents shall be the issue in effect on the date of invitation for bid.
Operation beyond the rated voltage or current may result in rupture, electrical arcing or flame.

Materials Information

| ROHS Compliant | ELV Compliant | Pb-Free |
| :---: | :---: | :---: | :---: |
| Directive 2002/95/EC <br> Compliant | Directive 2000/53/EC <br> Compliant |  |

* Halogen Free refers to: $\mathrm{Br} \leq 900 \mathrm{ppm}, \mathrm{Cl} \leq 900 \mathrm{ppm}, \mathrm{Br}+\mathrm{Cl} \leq 1500 \mathrm{ppm}$

Expertise Applied | Answers Delivered

PRODUCT: SMD150F/33
DOCUMENT: SCD25168
REV LETTER: G
REV DATE: JULY 26,2016
PAGE NO.: 2 OF 2


#### Abstract

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