|  |  |  |
| --- | --- | --- |
| Parameters | Values | Units |
| Rth (j-c) IGBT | 0.066 | K/W |
| Rth(j-c) FWD | 0.120 | K/W |
| Rth(case)1 | 0.00001 | K/W |
| Rth(case)2 | 0.00001 | K/W |
| Rth(case)3 | 0.00001 | K/W |
| Rth(paste) | 0.015 | K/W |
| Rth(heatsink) | 0.01 | K/W |

|  |  |  |
| --- | --- | --- |
| Power loss of each IGBT | 250 | W |
| Power loss of each FWD | 84 | W |

|  |  |  |
| --- | --- | --- |
| T(ambient) | 40 | Celsius |
| Tj IGBT 1U | 106.6 | Celsius |
| Tj IGBT 1L |  | Celsius |
| Tj IGBT 2U |  |  |
| Tj IGBT 2L |  |  |
| Tj IGBT 1 |  |  |
| Tj IGBT 3L |  |  |
| Tj FWD 1U | 100 | Celsius |
| Tj FWD 1L |  |  |
| Tj FWD 2U |  |  |
| Tj FWD 2L |  |  |
| Tj FWD 3U |  |  |
| Tj FWD 3L |  |  |
| Tcase | 90.1 | Celsius |

**Rth(j-c): thermal resistance junction to case**

**Tj IGBT 1U: Junction temperature of the upper IGBT of the phase 1**

**Tj IGBT 1L: Junction temperature of the lower IGBT of the phase 1**

**Tj FWD 1U: Junction temperature of the upper free-wheeling diode of the phase 1**

**Tj FWD 1L: Junction temperature of the lower free-wheeling diode of the phase 1**