

**$V_{\text{RRM}} = 800\text{-}1800 \text{ V}$**   
 **$I_{\text{F(RMS)}} = 40 \text{ A}$**   
 **$I_{\text{F(AVM)}} = 25 \text{ A}$**

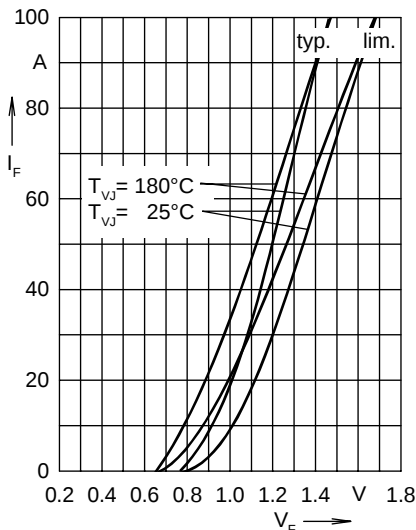


Fig. 1 Forward characteristics

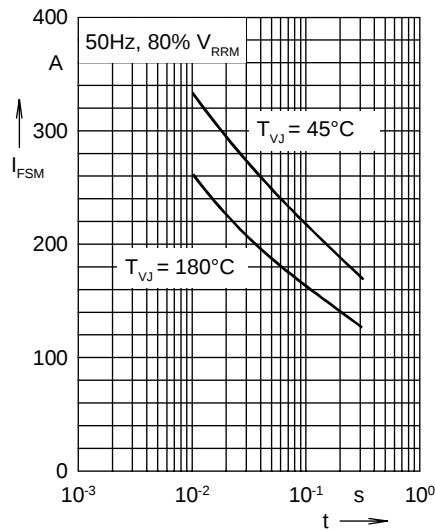


Fig. 2 Surge overload current  
 $I_{FSM}$ : crest value,  $t$ : duration

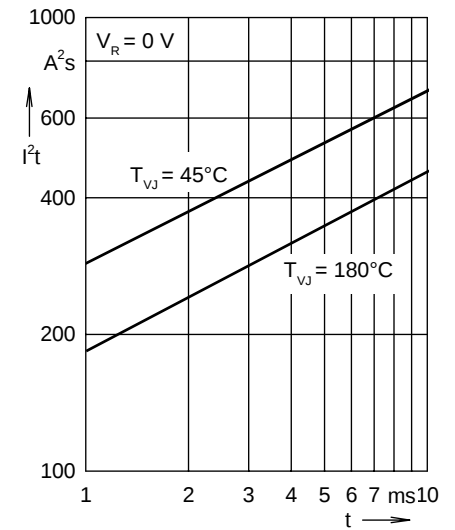


Fig. 3  $I^2t$  versus time (1-10 ms)

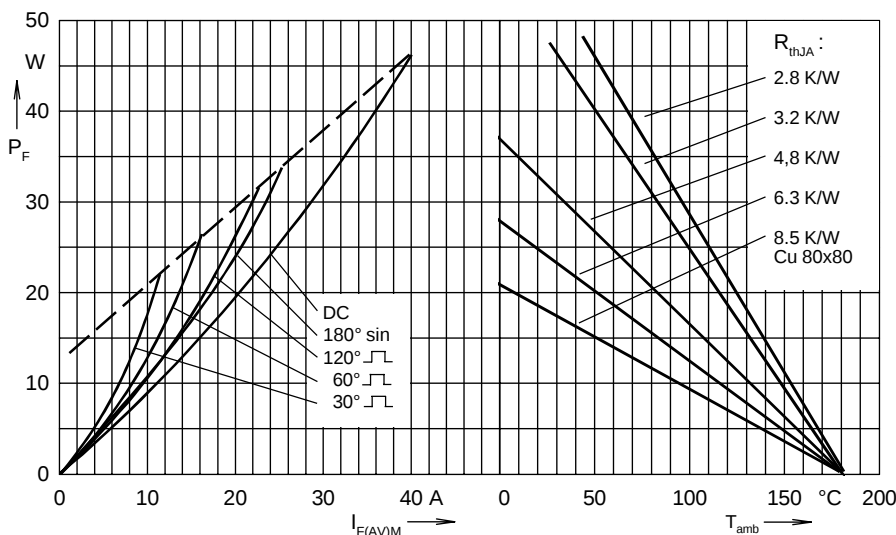


Fig. 4 Power dissipation versus forward current and ambient temperature

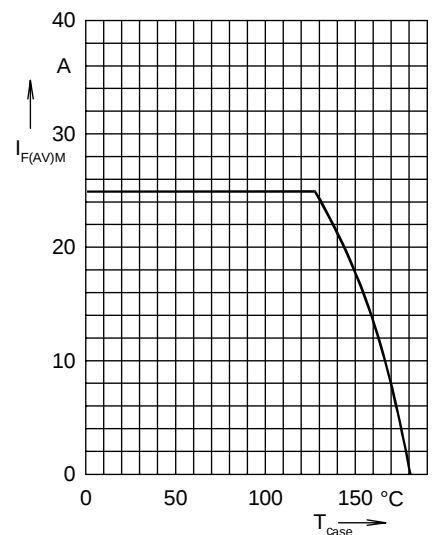


Fig. 5 Max. forward current at case temperature 180° sine

$R_{thJH}$  for various conduction angles  $d$ :

| $d$  | $R_{thJH}$ (K/W) |
|------|------------------|
| DC   | 2.10             |
| 180° | 2.23             |
| 120° | 2.33             |
| 60°  | 2.53             |
| 30°  | 2.72             |

Constants for  $Z_{thJH}$  calculation:

| $i$ | $R_{thi}$ (K/W) | $t_i$ (s) |
|-----|-----------------|-----------|
| 1   | 0.1006          | 0.0021    |
| 2   | 0.5311          | 0.0881    |
| 3   | 0.8683          | 2.968     |
| 4   | 0.600           | 3.20      |

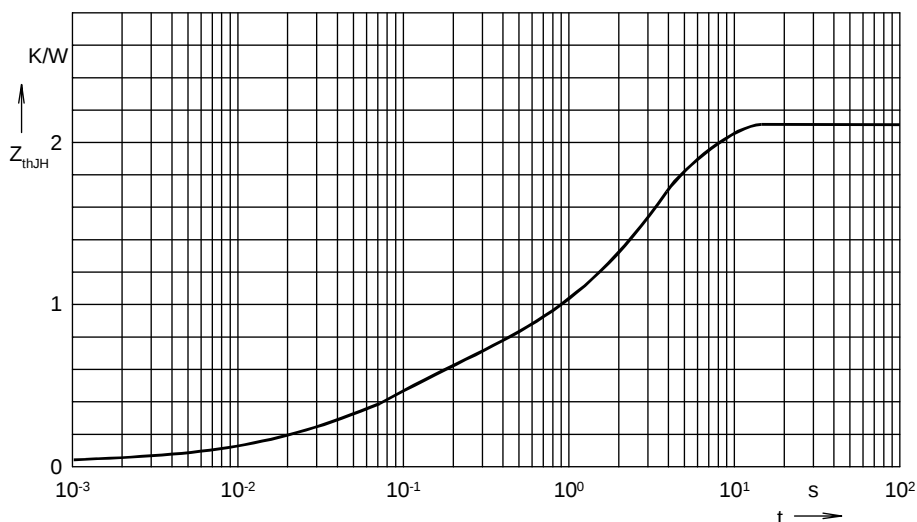


Fig. 6 Transient thermal impedance junction to heatsink