

GPDR3629

RECTIFIER DIODE



VOLTAGE UP TO 2600 V
AVERAGE CURRENT 6295 A
SURGE CURRENT 60 kA

BLOCKING CHARACTERISTICS

| Characteristic | Conditions | Value |
|----------------|---------------------------------------|---|
| VRRM | Repetitive peak reverse voltage | 2600 V |
| VRSM | Non-repetitive peak reverse voltage | 2700 V |
| IRRM | Repetitive peak reverse current, max. | VRRM, single phase, half wave, Tj = Tjmax |
| | | 150 mA |

FORWARD CHARACTERISTICS

| | | | |
|--------|------------------------------|--|------------|
| IF(AV) | Average forward current | Sine wave, 180° conduction, Th = 55°C | 6295 A |
| IF(AV) | Average forward current | Sine wave, 180° conduction, Tc = 85°C | 5810 A |
| IFSM | Surge forward current | Non rep. half sine wave, 50 Hz, VR = 0 V, Tj = Tjmax | 60 kA |
| I²t | I² t for fusing coordination | | 18000 kA²s |
| VF(TO) | Threshold voltage | Tj = Tjmax | 0.96 V |
| rF | Forward slope resistance | Tj = Tjmax | 0.053 mΩ |
| VFM | Peak forward voltage, max | Forward current IF = 6000 A, Tj = Tjmax | 1.28 V |

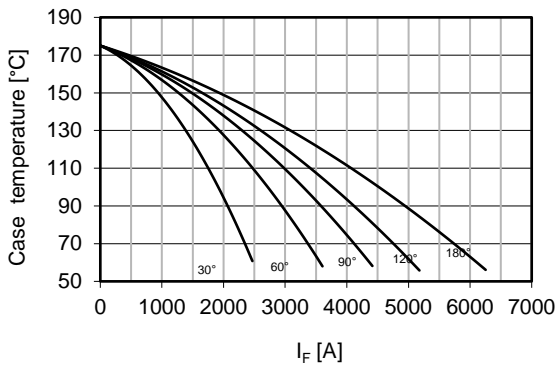
SWITCHING CHARACTERISTICS

| | | | |
|-----|------------------------------|--|----|
| Qrr | Reverse recovery charge, typ | Tj = Tjmax, IF = 2000 A, di/dt = -5 A/μs | μC |
| Irr | Reverse recovery current | VR = 100 V | A |
| trr | Reverse recovery time | | μs |
| VFP | Forward recovery voltage | Tj = Tjmax, di/dt = A/μs | V |

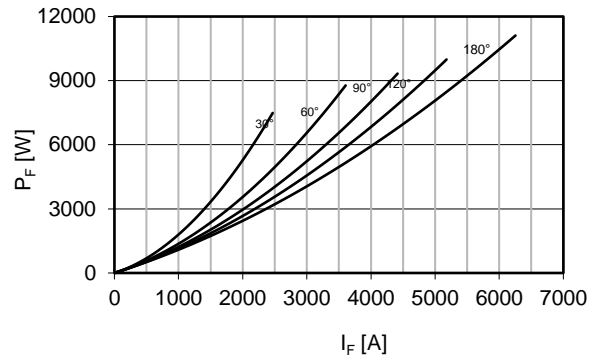
THERMAL AND MECHANICAL CHARACTERISTICS

| | | | |
|----------|---------------------------------------|--------------------|--------------|
| Rth(j-c) | Thermal resistance (junction to case) | Double side cooled | 0.009 °C/W |
| Rth(c-h) | Thermal resistance (case to heatsink) | Double side cooled | 0.003 °C/W |
| Tjmax | Max operating junction temperature | | 175 °C |
| Tstg | Storage temperature | | -40 / 175 °C |
| F | Clamping force ± 10% | | 50 kN |
| | Mass | | 900 g |

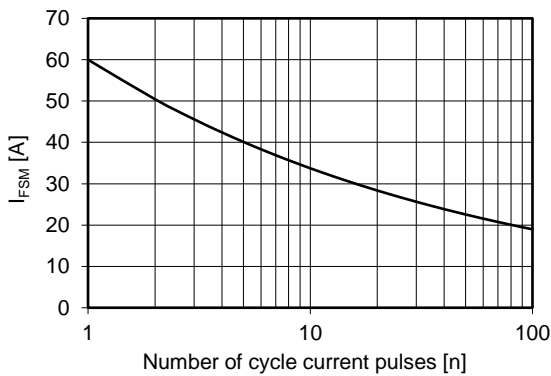
Current rating - sine wave



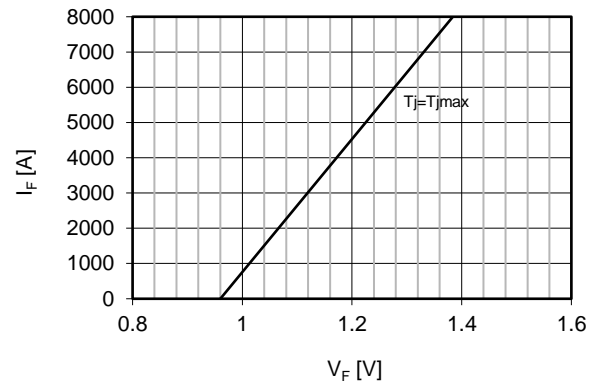
Power loss - sine wave



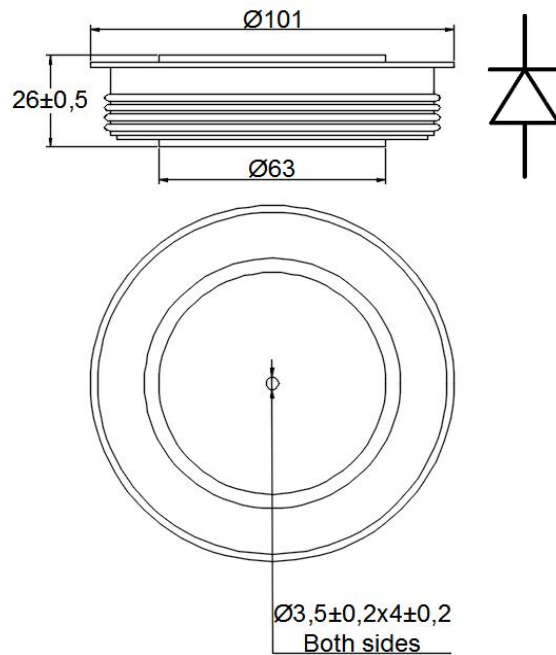
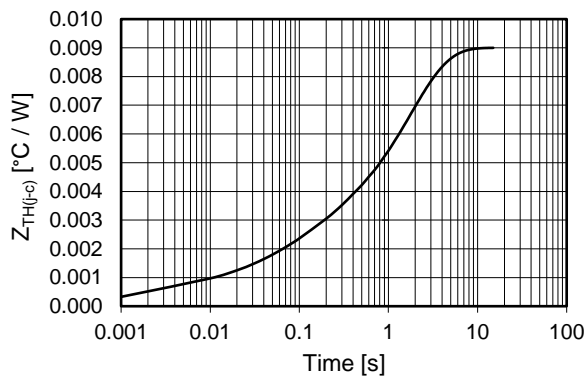
Maximum surge current d.s. cooled



Forward voltage drop



Thermal Impedance (j-c)



Ordering information GPDR3629-VV

VV: blocking voltage / 100 (e.g. 26 for 2600V)

In the interest of product improvement Green Power Solutions reserves the right to change any specification given in this data sheet without notice.