

GPDP3284

RECTIFIER DIODE



VOLTAGE UP TO 2800 V
AVERAGE CURRENT 2840 A
SURGE CURRENT 35 kA

BLOCKING CHARACTERISTICS

Characteristic		Conditions	Value
VRRM	Repetitive peak reverse voltage		2800 V
VRSM	Non-repetitive peak reverse voltage		2900 V
IRRM	Repetitive peak reverse current, max.	VRRM, single phase, half wave, Tjmax	50 mA

FORWARD CHARACTERISTICS

IF(AV)	Average forward current	Sine wave, 180° conduction, Th = 55°C	2840 A
IF(RMS)	R.M.S. forward current	Sine wave, 180° conduction, Th = 55°C	4459 A
IFSM	Surge forward current	Non rep. half sine wave, 50 Hz, VR = 0 V, Tj = Tjmax	35 kA
I²t	I² t for fusing coordination		6125 kA²s
VF(TO)	Threshold voltage	Tj = Tjmax	0.905 V
rF	Forward slope resistance	Tj = Tjmax	0.135 mΩ
VFM	Peak forward voltage, max	Forward current IF = 3000 A, Tj = Tjmax	1.31 V

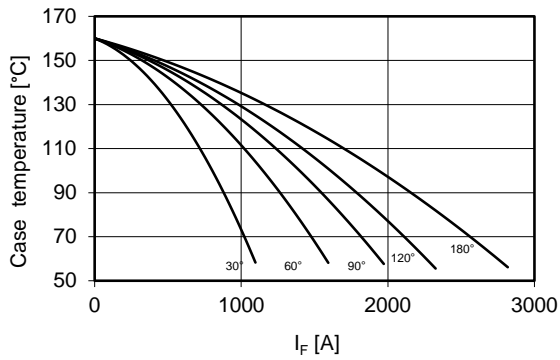
SWITCHING CHARACTERISTICS

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

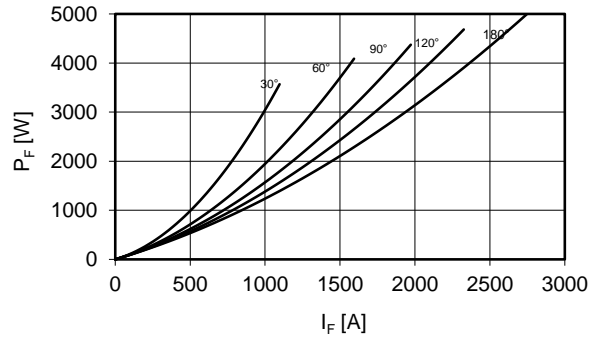
THERMAL AND MECHANICAL CHARACTERISTICS

Rth(j-c)	Thermal resistance (junction to case)	Double side cooled	0.016 °C/W
Rth(c-h)	Thermal resistance (case to heatsink)	Double side cooled	0.004 °C/W
Tjmax	Max operating junction temperature		160 °C
Tstg	Storage temperature		-40 / 160 °C
F	Clamping force ± 10%		22 kN
	Mass		500 g

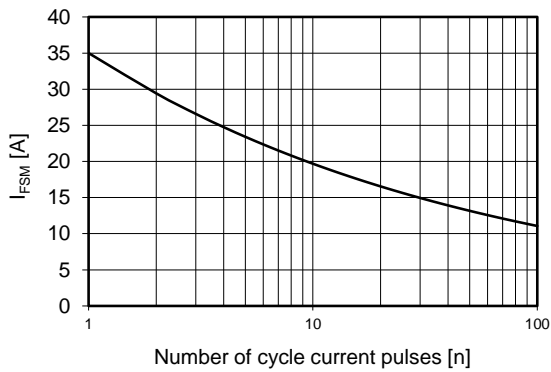
Current rating - sine wave



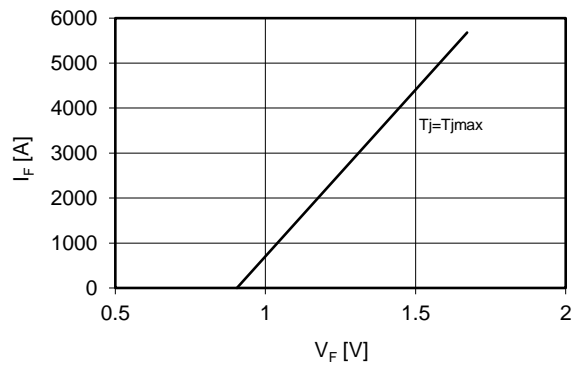
Power loss - sine wave



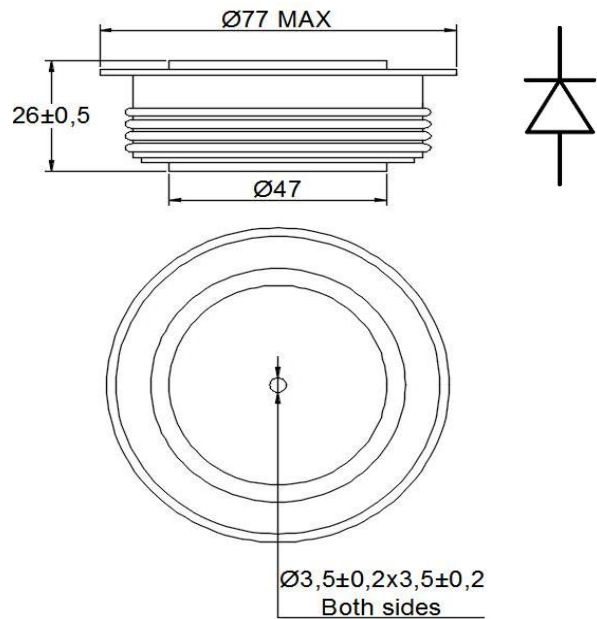
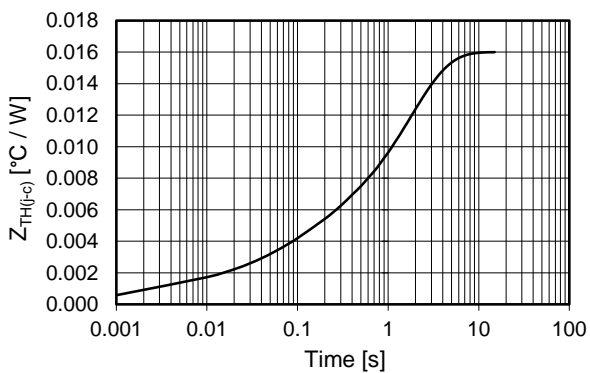
Maximum surge current d.s. cooled



Forward voltage drop



Thermal Impedance (j-c)



Ordering information GPDP3284-VV

VV: blocking voltage / 100 (e.g. 28 for 2800V)

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