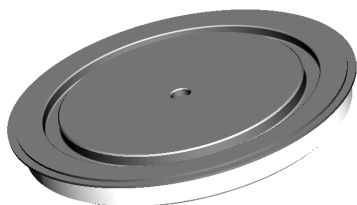


GPDC0799

RECTIFIER DIODE



Low profile ceramic package
Spot welding applications
Electroplating applications

VOLTAGE UP TO 200 V
AVERAGE CURRENT 7990 A
SURGE CURRENT 55 kA

BLOCKING CHARACTERISTICS

Characteristic	Conditions	Value
VRRM	Repetitive peak reverse voltage	200 V
VRSM	Non-repetitive peak reverse voltage	300 V
IRRM	Repetitive peak reverse current, max.	VRRM, single phase, half wave, Tj = Tjmax
		50 mA

FORWARD CHARACTERISTICS

IF(AV)	Average forward current	Sine wave, 180° conduction, Tc = 70°C	7990 A
IF(RMS)	R.M.S. forward current	Sine wave, 180° conduction, Tc = 70°C	12551 A
IFSM	Surge forward current	Non rep. half sine wave, 50 Hz, VR = 0 V, Tj = Tjmax	55 kA
I²t	I² t for fusing coordination		15125 kA²s
VF(TO)	Threshold voltage	Tj = Tjmax	0,74 V
rF	Forward slope resistance	Tj = Tjmax	0,026 mΩ
VFM	Peak forward voltage, max	Forward current IF = 5000 A, Tj = 25°C	1,05 V

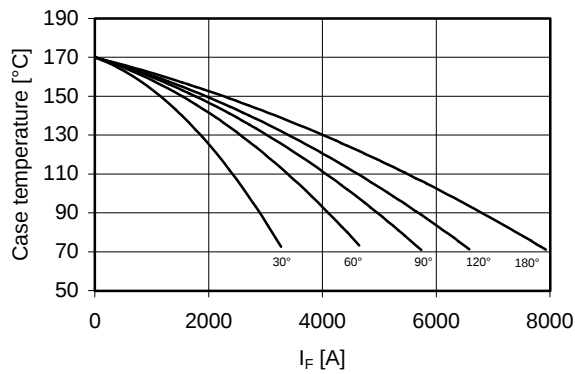
SWITCHING CHARACTERISTICS

Qrr	Reverse recovery charge, typ	Tj = Tjmax, IF = 1000 A, di/dt = -30 A/μs	500 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

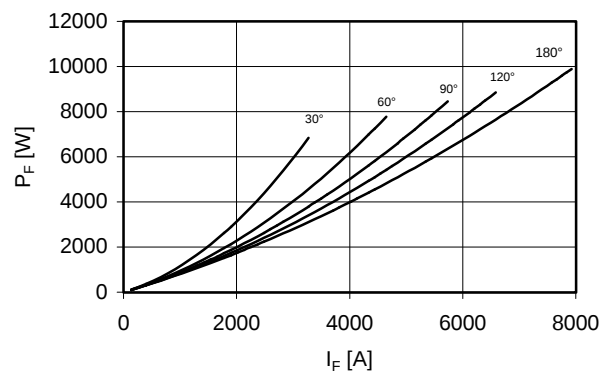
THERMAL AND MECHANICAL CHARACTERISTICS

Rth(j-c)	Thermal resistance (junction to case)	Double side cooled	0,010 °C/W
Rth(c-h)	Thermal resistance (case to heatsink)	Double side cooled	0,005 °C/W
Tjmax	Max operating junction temperature		170 °C
Tstg	Storage temperature		-40 / 170 °C
F	Clamping force ± 10%		22 kN
	Mass		150 g

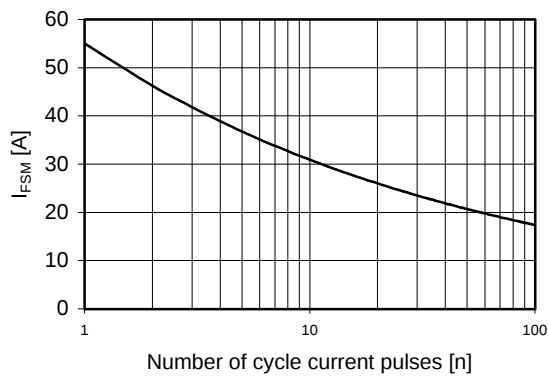
Current rating - sine wave



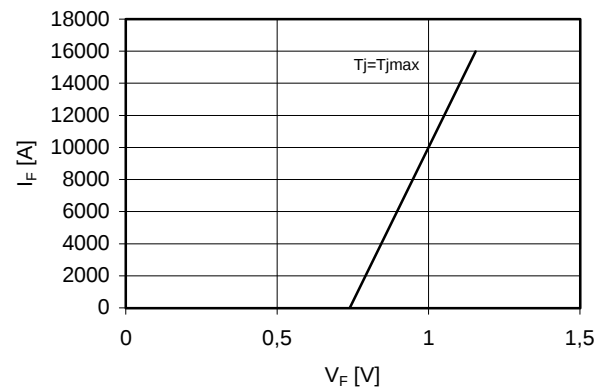
Power loss - sine wave



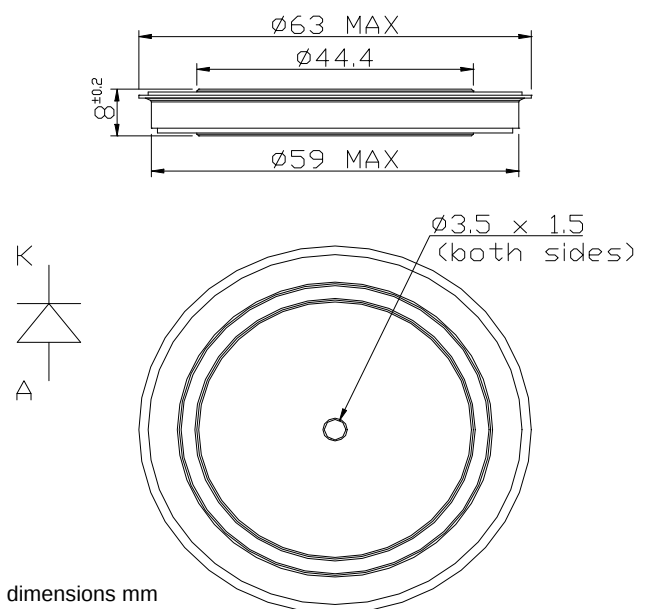
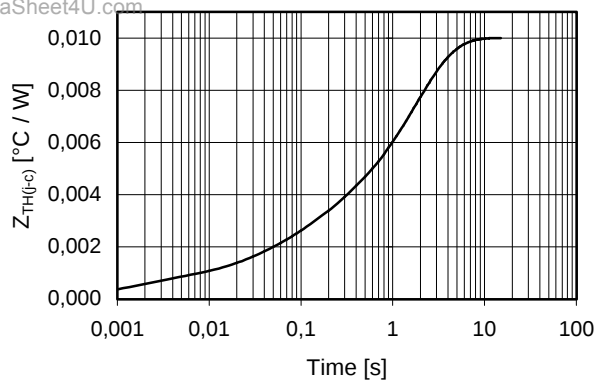
Maximum surge current
d.s. cooled



Forward voltage drop



Thermal Impedance (j-c)



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