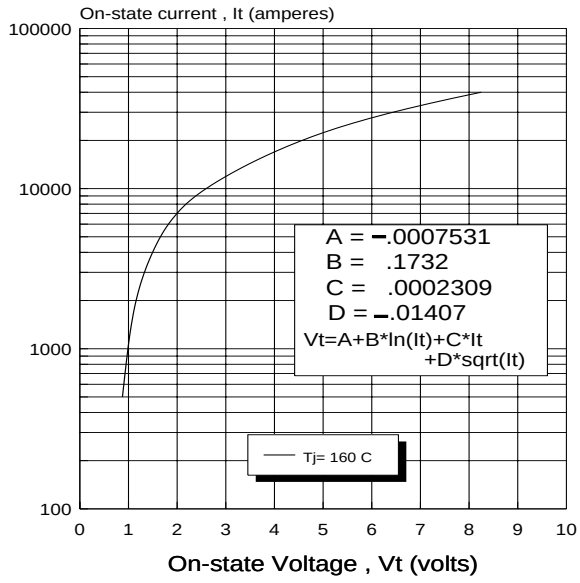
A880
77mm RECTIFIER DIODE
4500 V / 2900 A

The A880 rectifier diode features a nominal 77mm silicon junction diameter design , manufactured by the proven multi-diffusion process. High reverse voltage blocking capability is optimized with moderate recovery current and low forward voltage.

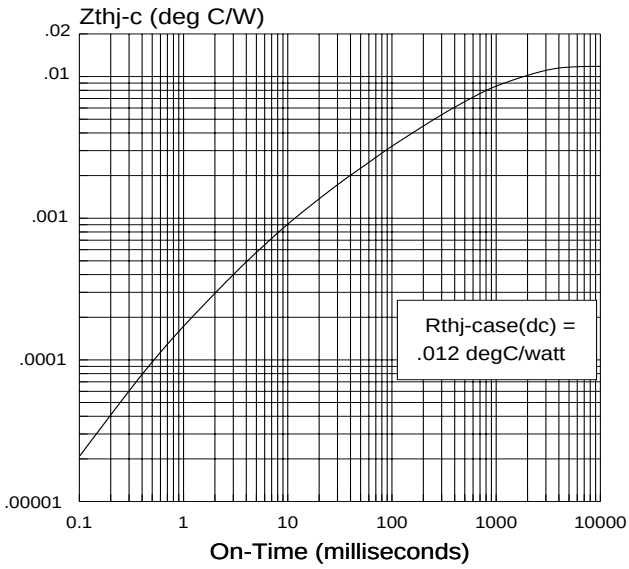
A880 is designed specifically for transportation, industrial and utility 50/60 Hz rectifiers having very high current surge and I^2t requirements.

MAXIMUM FORWARD CHARACTERISTIC



91B/A880onst

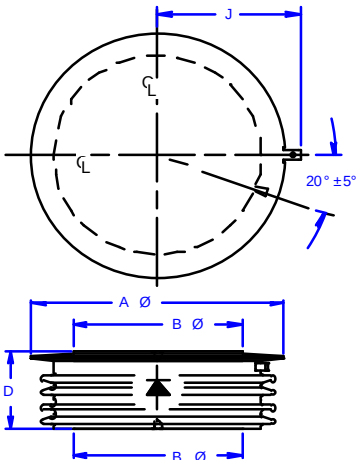
THERMAL IMPEDANCE vs. ON-TIME



SELECTION TABLE

Model No.	Repetitive Peak Reverse Voltage V_{RRM} @ T_J = -40 to 170°C	V_{RRM} @ T_J = 200°C
A880DE	4500 V	3900 V
A880DD	4400	3800
A880DC	4300	3700
A880DB	4200	3600
A880DA	4100	3500
A880DP	4000	3400
A880CT	3900	3300
A880CN	3800	3200

MECHANICAL OUTLINE



AΦ = 4.35 in (110.5 mm)
BΦ= 2.88 in (73.2 mm)
D= 1.45 in (36.8 mm)

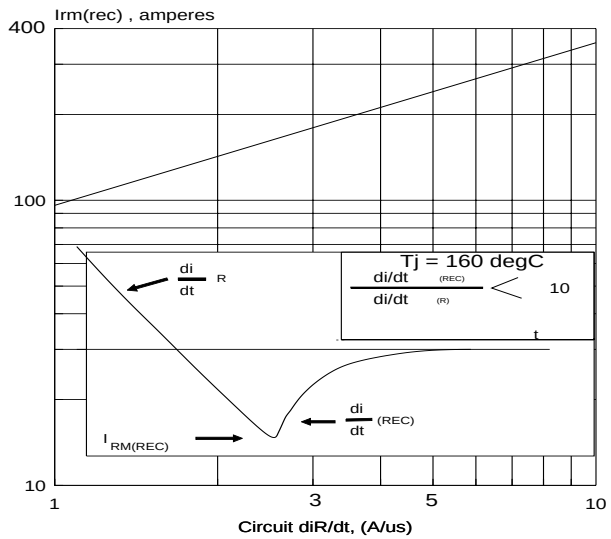
CLAMPING FORCE REQUIRED
7000 - 9000 lb / 31.1 - 40.0 kN

175 Great Valley Pkwy. Malvern, PA 19355
USA

LIMITING CHARACTERISTICS AND RATINGS

PARAMETER	SYMBOL	TEST CONDITIONS	MAX. VALUES	UNITS
Average current	I_{AV}	half sine T_C=100°C	2900	A
Repetitive peak reverse voltage	V_{RRM}	T_J = -40 to +170°C 50/60 Hz	see page 1	V
Repetitve peak reverse current	I_{RRM}	T_J=170° 25°	100 15	ma
Forward voltage	V_{FM}	T_J=160° I_F=2000A	1.15	V
Non-rep peak surge current	I_{FSM}	T_J=160° t_p=8.3ms t_p=10ms V_R=0	40 36	kA

MAXIMUM PEAK RECOVERY CURRENT



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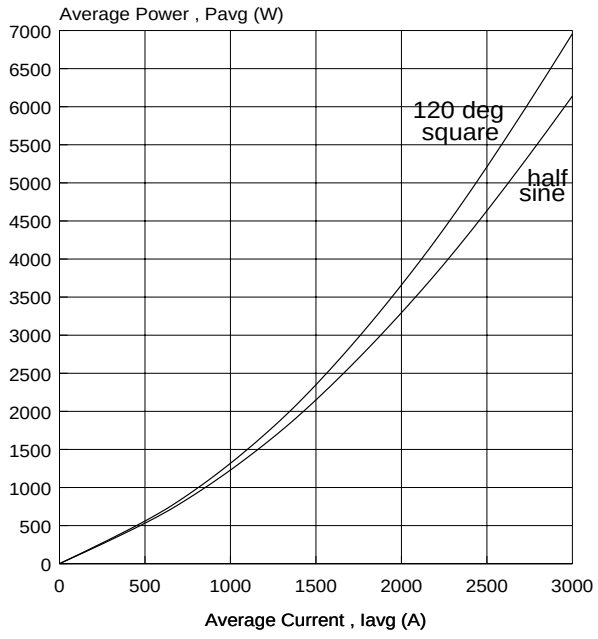
POWER DISSIPATION
Full Cycle Average



91B\A880PWR

AVERAGE POWER DISSIPATION

Tj = 160 degC

I_{AV} (A)	half sine	120° sq. wave
500	509	533
750	841	891
1000	1221	1308
1250	1651	1786
1500	2132	2327
2000	3251	3602
2500	4585	5155
3000	6139	6958