

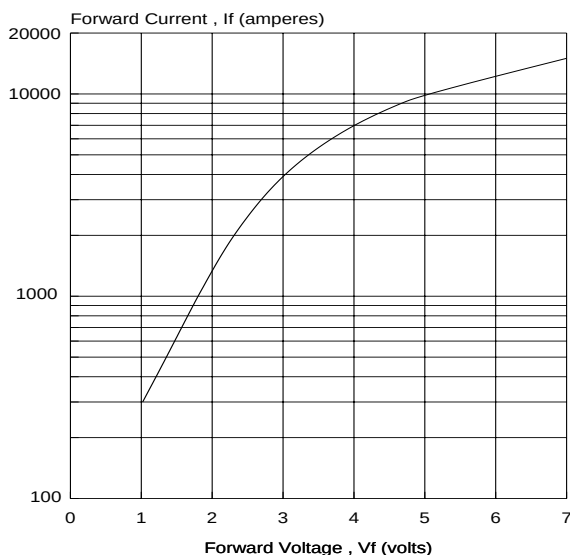
A796

53mm Fast Recovery DIODE

1500 - 2500V

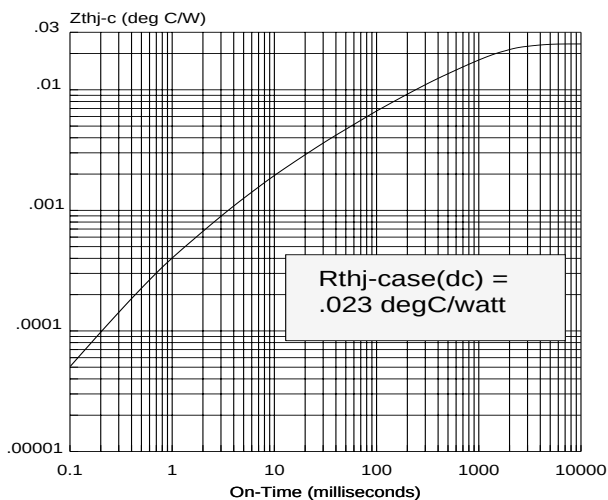
The A796 fast recovery diode is designed as a parallel mate for GTO's used in voltage fed inverter circuits normally requiring the bypass function. Its relatively low recovery current and charge in combination with low thermal resistance offer a new advantage for optimizing other circuit components. It is manufactured by the proven multi-diffusion process with 53 mm diameter silicon and is supplied in a disc-type package ready to mount using commercially available heat dissipators and clamping hardware.

FORWARD CHARACTERISTIC
Process Maximum @ $T_j=125^\circ\text{C}$



91C:7/12/96

THERMAL IMPEDANCE vs. ON-TIME

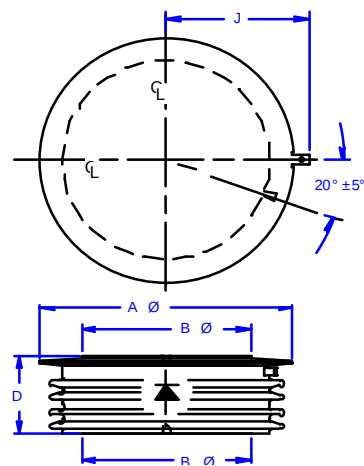


MAXIMUM RATINGS & PARAMETERS

Maximum repetitive peak reverse voltage	V_{RRM}	$T_j = -40$ to $+125^\circ\text{C}$	2500	V
Maximum forward average & RMS current ratings	$I_{F(AV)}$ I_{RMS}	$T_{case} 70^\circ\text{C}$	925 1450	A
Maximum reverse leakage current	I_{RRM}		75	ma
Forward voltage drop	V_{FN}	$I_F=1000A$ $t_F=8.3ms$ $T_j=125^\circ\text{C}$	1.75V	
Maximum peak recovery current	I_{RR}	@ 10 A/us @ 100 A/us	45 220	A
Maximum recovery charge	Q_{RR}	@ 10 A/us @ 100A/us	200 500	uC
Typical recovery time and snap factor	t_{RR}		35 05	us

*(tested with 1uF, 4 ohm snubber)

MECHANICAL OUTLINE



$A \Phi = 2.96 \text{ in (75.2 mm)}$

$B \Phi = 1.90 \text{ in (48.3 mm)}$

$D = 1.07 \text{ in (27.2 mm)}$

CLAMPING FORCE REQUIRED
5000 - 6000 lb / 22.4 - 26.7 kN