

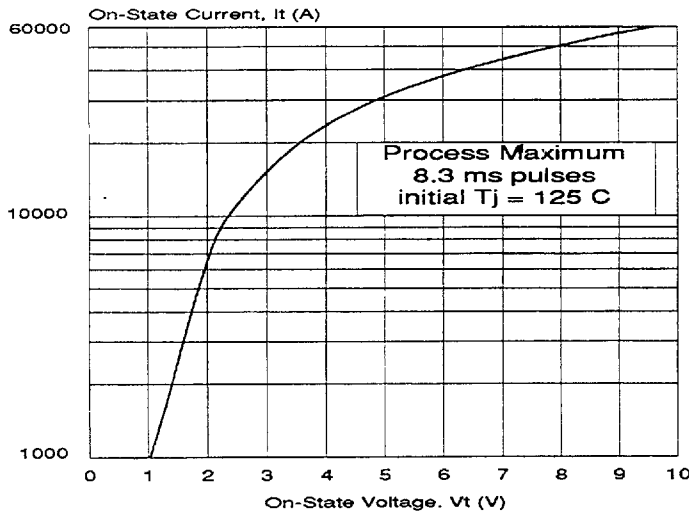
# 125mm INVERTER THYRISTOR XSPT402

4500V / 400us / 5600A (avg)

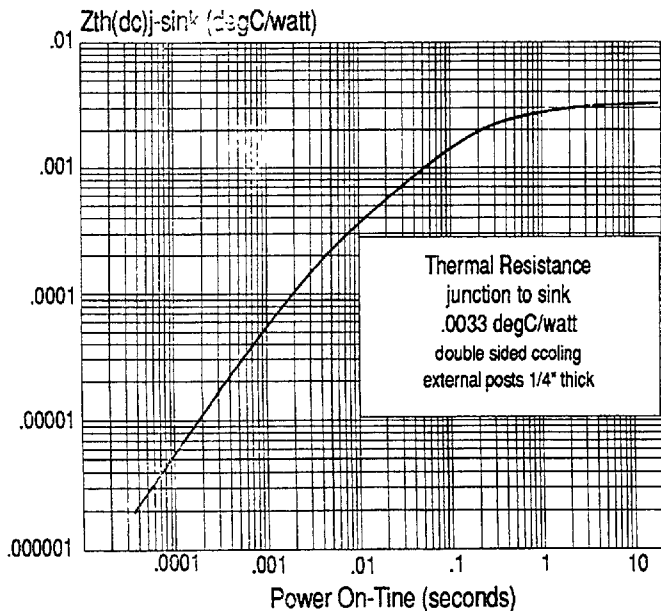
Type SPT402 reverse blocking thyristor is suitable for inverter applications. The silicon junction is manufactured by the proven multi-diffusion process and utilizes the exclusive involute gate structure. It is supplied in a high integrity plastic package intended for single or double sided cooling using commercially available heat dissipators in combination with external post inserts and clamping hardware.

Prefix "X" signifies that the product is in the early stage of design. Some characteristics may change in the final design.

## ON-STATE CHARACTERISTIC



## THERMAL IMPEDANCE

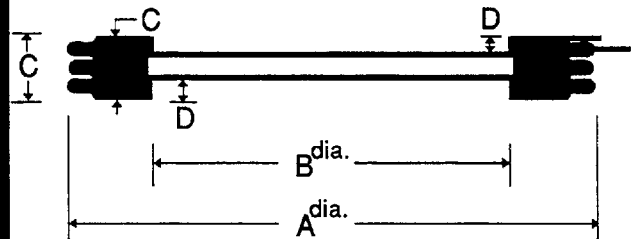


## REPETITIVE BLOCKING VOLTAGE OFF-STATE AND REVERSE

MODEL	$V_{DRM} / V_{RRM}$ 0 to +125°C	@ -40°C
XSPT402HK	4500 volts	4400 volts
XSPT402FT	4000	3900
XSPT402FK	3500	3400

Gate Drive Requirements:  
40V / 10 ohms / 0.5us risetime  
10 - 20 us minimum duration  
Average Current Rating  
5600A for  $T_{post} = 70°C$

## MECHANICAL OUTLINE



### Nominal Dimensions

	inch	mm
A dia.	6 13/32	162.7
B dia.	4 3/16	106.4
C	43/64	17.06
D	0.230	5.84

External Clamping Force:  
25000 lbs. (nominal)

SILICON POWER CORPORATION  
175 GREAT VALLEY PKWY. MALVERN, PA 19355  
USA

. 7/13/95