



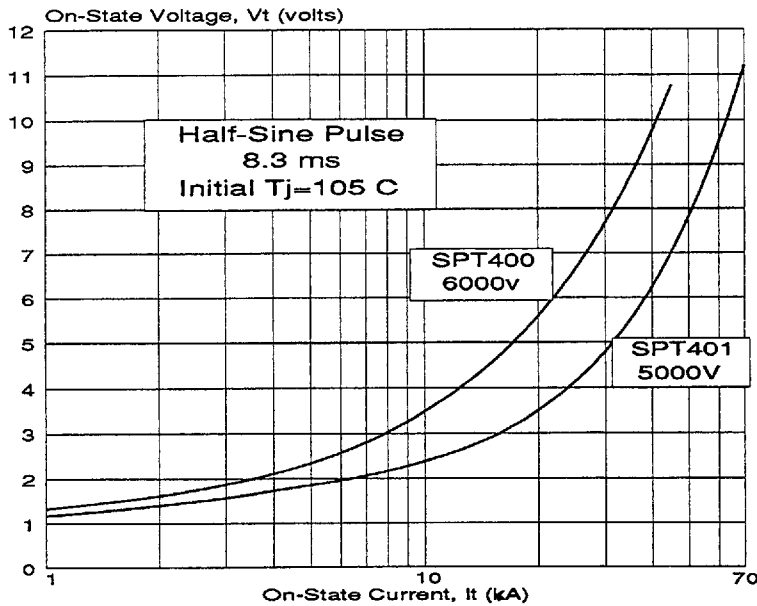
XSPT400 / XSPT401 125mm THYRISTORS

6000V, 4000A / 5000V, 5800A

Type XSPT400 series thyristors are suitable for phase control applications such as for HVDC valves, static VAR compensators and synchronous motor drives. The silicon junction design utilizes a second generation pilot gate and a unique orientation of emitter shorts which promote the lateral expansion of conducting plasma resulting in lower spreading losses while achieving high dv/dt withstand. It is supplied in a **reliable plastic light weight package**. The design utilizes a new termination technique which eliminates heavy refractory metal as a substrate but still employs the alloyed anode interface necessary for high surge current duty. External posts are available for adjoining commercially available heat dissipators using clamping hardware.

ON-STATE CHARACTERISTIC

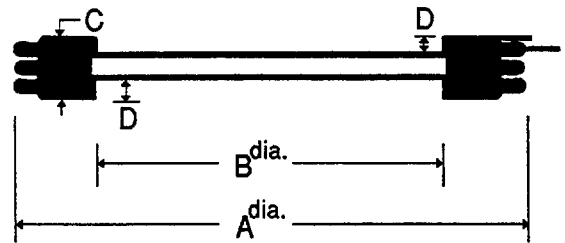
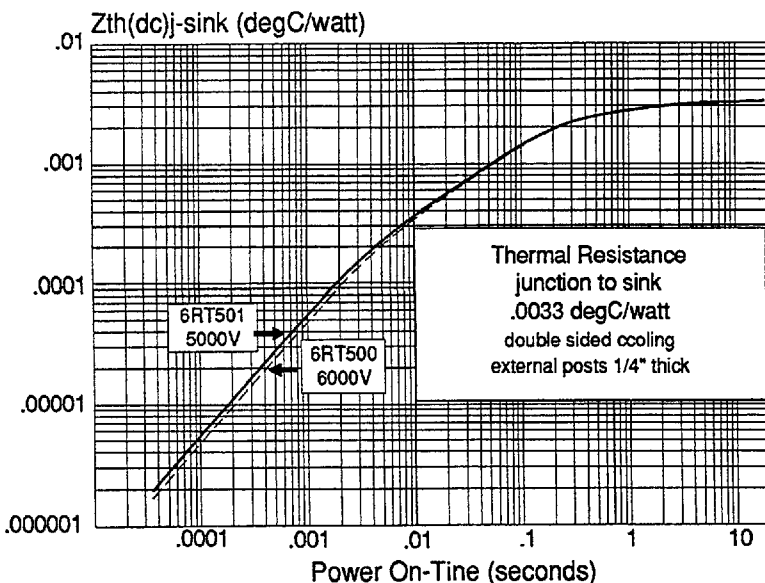
Process Maximum



Maximum Off-State & Reverse Blocking Voltage Ratings

	V_{DRM} and V_{RRM}
XSPT400KT	6000 volts
XSPT400KR	5800
XSPT400KM	5600 $T_j = 0$ to 115°C
XSPT400KH	5400
XSPT400KD	5200
XSPT401HT	5000 volts
XSPT401HR	4800
XSPT401HM	4600 $T_j = 0$ to 125°C
XSPT401HH	4400
XSPT401HD	4200

THERMAL IMPEDANCE vs. POWER ON-TIME



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

Prefix "X" signifies a product in development.
Ratings and characteristics may change significantly for the final design.

7/13/95

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18