

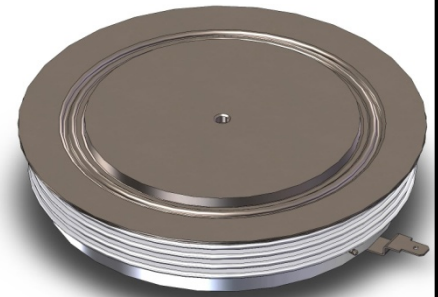
83mm ϕ Si Phase Control Thyristor

September 2012 Issue 2

Two new products have been added to IXYS UK's phase control portfolio. The new introductions are of alloyed construction which offers superior thermal and surge capability. These devices are manufactured on 83mm ϕ silicon and are available with maximum voltages of 2.8kV and 4.5kV. The larger silicon diameter maximises current rating within the package envelope with 30% more current rating than the established 77mm ϕ silicon products.

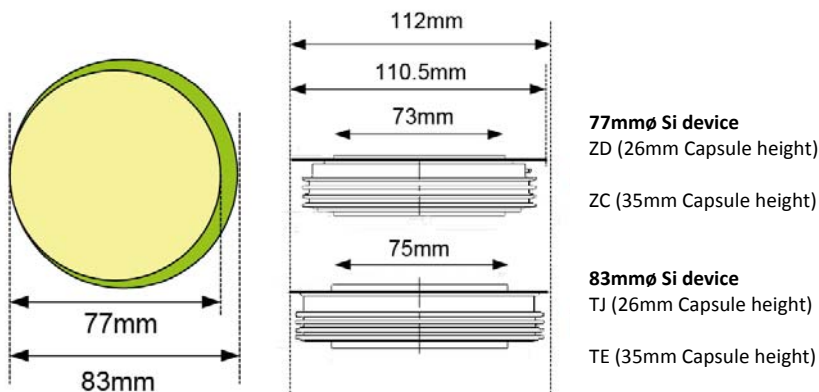
These thyristors are constructed using an all diffused silicon slice, fused to a metal disc and the die is encapsulated in a fully hermetic package. This new package design allows for better production control and improved quality. Overall, this product offers much better construction and performance when compared to similarly rated devices using 'alloy free' or conventionally built alloyed die packaging.

In addition to the two new introductions, 1.8kV and 6.5kV devices are in development with other products planned for release at the end of 2012 going in to 2013. Please consult the factory for your requirements.



Features and Benefits

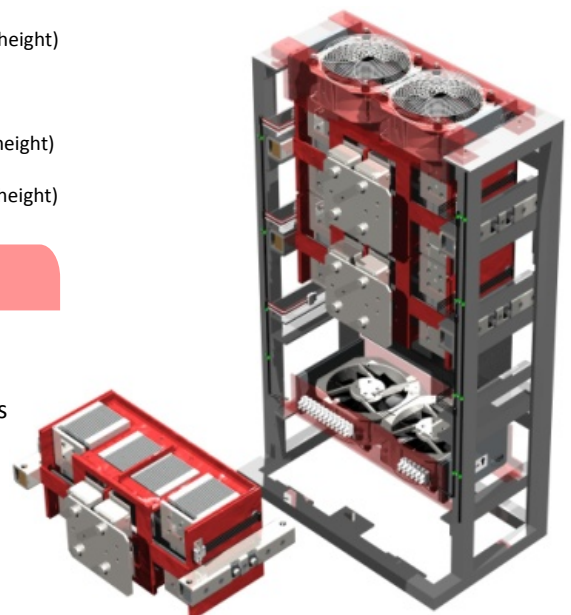
- Fully Hermetic Press-pack
- Alloyed Construction
- Better Transient Thermal
- Enhanced Surge Rating
- Improved Package Design
- Optimised Processing



Applications

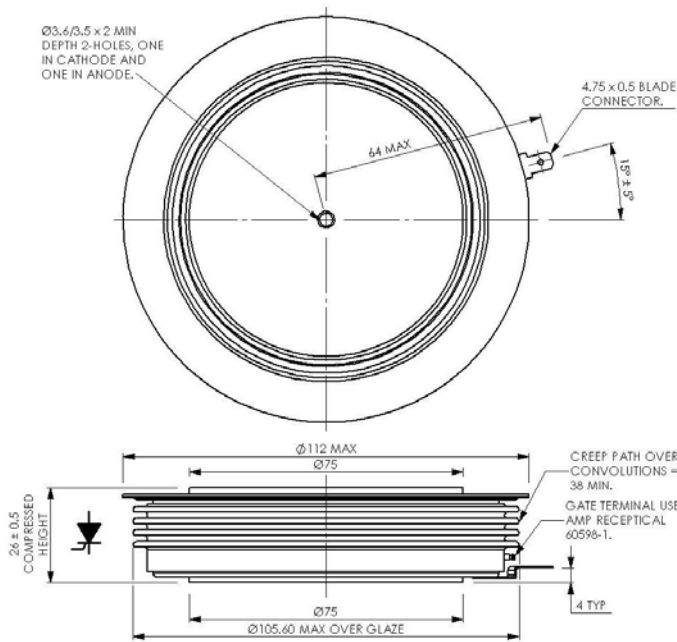


- Industrial Drives
- Wind Power Converters
- Soft Starters
- Electrochemical Power Supplies
- Controlled Rectifiers

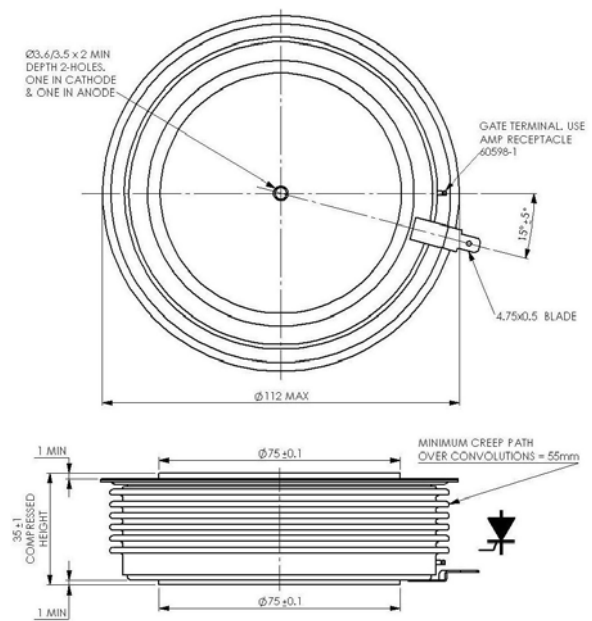


Advance Product Brief – 83mm ϕ Si Phase Control Thyristor

Part No.	V_{DRM} V_{RRM} V	I_{TAV} $T_C = 55^\circ C$ A	I_{TSM} 10ms kA	I^2t 10ms A^2s	V_{TO} V	r_T T_{JM} m Ω	R_{thJK} 180 $^\circ C$ K/W	Outline
NX318TJ180	1800	In Development					0.008	W81
NX318TE180	1800						0.008	W82
N3790TJ240	2400	3790	55	15.1×10^6	0.9	0.15	0.008	W81
N3790TJ280	2800	3790	55	15.1×10^6	0.9	0.15	0.008	W81
N3790TE240	2400	3790	55	15.1×10^6	0.9	0.15	0.008	W82
N3790TE280	2800	3790	55	15.1×10^6	0.9	0.15	0.008	W82
N2825TJ400	4000	2825	41	8.4×10^6	1.21	0.27	0.008	W81
N2825TJ420	4200	2825	41	8.4×10^6	1.21	0.27	0.008	W81
N2825TJ450	4500	2825	41	8.4×10^6	1.21	0.27	0.008	W81
N2825TE400	4000	2825	41	8.4×10^6	1.21	0.27	0.008	W82
N2825TE420	4200	2825	41	8.4×10^6	1.21	0.27	0.008	W82
N2825TE450	4500	2825	41	8.4×10^6	1.21	0.27	0.008	W82
NX409TJ600	6000	In Development					0.008	W81
NX409TJ650	6500						0.008	W81
NX409TE600	6000						0.008	W82
NX409TE650	6500						0.008	W82



W81 – 101A373



W82 – 101A395



Certificate FM26085

IXYS UK Westcode Ltd's BS EN ISO9001 quality system is registered by BSI



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