

Large Area Phase Control Thyristors and Rectifier Diodes

March 2013 – Issue 1

These new introductions are constructed using an all diffused silicon slice fused to a metal disc. The thermal capacity of the metal disc and its direct fusion to the silicon enhances performance presenting excellent transient thermal and surge current ratings. The new package designs, while retaining an industry standard footprint, allows for the maximum silicon to package ratio and present higher current density over older designs in a similar package outline.

Phase control thyristors are available with current ratings up to 4340A and voltage ratings up to 4500V

Rectifier diodes are available with current ratings up to 9830A and voltage ratings up to 4800V



MORE POWER, LESS PACKAGE

Features and Benefits

- 83mm ϕ Silicon, Alloyed Construction
- Higher Thermal Capacity
- Hermetically Sealed
- Improved Reliability
- Higher Current Density
- Double Side Cooling
- Available in Both 26mm and 35mm Industry Standard Housing Options

Further products including a new 6.5kV thyristor for medium voltage applications will be added to this product group during 2013; Consult factory for details

Thyristor Applications

- Industrial Drives
- Wind Power Converters
- Soft Starters
- Excitation
- Utilities
- Controlled Rectifiers



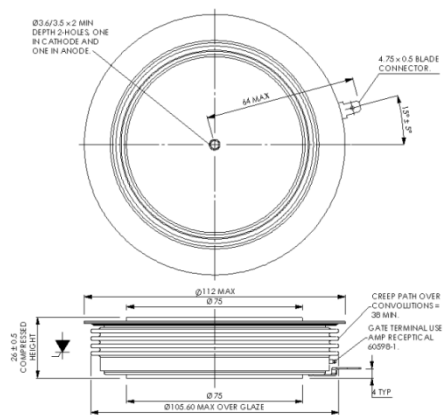
Diode Applications

- Track Side Rectifiers
- Chemical Power Supplies
- Industrial Rectifiers
- General Rectifier Applications



Phase Control Thyristors

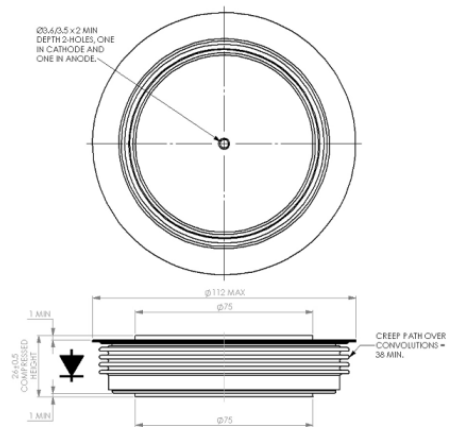
Part No.	V_{DRM}/V_{RRM} V	I_{FAV} A	I_{FSM} kA	V_{TO} V	r_T mΩ	T_{JM} °C	R_{thJK} K/W	Outline
N4340TJ180	1800	4340	61	0.886	0.105	125	0.008	W81
N4340TJ220	2200	4340	61	0.886	0.105	125	0.008	W81
N4340TE180	1800	4340	61	0.886	0.105	125	0.008	W82
N4340TE220	2200	4340	61	0.886	0.105	125	0.008	W82
N3790TJ240	2400	3790	55	0.900	0.150	125	0.008	W81
N3790TJ280	2800	3790	55	0.900	0.150	125	0.008	W81
N3790TE240	2400	3790	55	0.900	0.150	125	0.008	W82
N3790TE280	2800	3790	55	0.900	0.150	125	0.008	W82
N2825TJ400	4000	2825	41	1.210	0.270	125	0.008	W81
N2825TJ450	4500	2825	41	1.210	0.270	125	0.008	W81
N2825TE400	4000	2825	41	1.210	0.270	125	0.008	W82
N2825TE450	4500	2825	41	1.210	0.270	125	0.008	W82



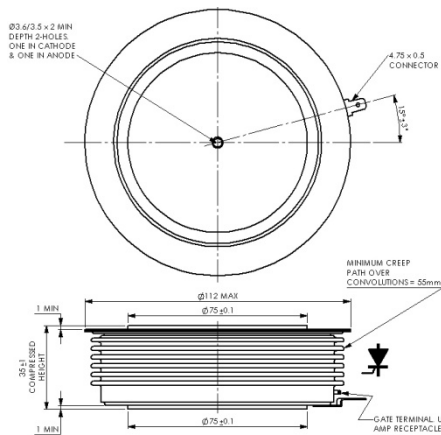
W81 – 101A373

Rectifier Diodes

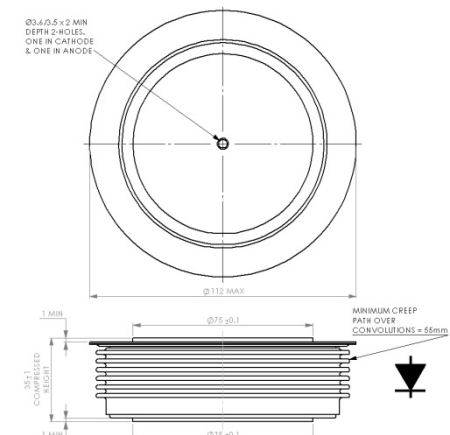
Part No.	V_{RRM} V	I_{FAV} A	I_{FSM} kA	V_{TO} V	r_T mΩ	T_{JM} °C	R_{thJK} K/W	Outline
W9830TJ120	1200	9830	80	0.670	0.043	190	0.008	W89
W9830TJ150	1500	9830	80	0.670	0.043	190	0.008	W89
W9830TE120	1200	9830	80	0.670	0.043	190	0.008	W94
W9830TE150	1500	9830	80	0.670	0.043	190	0.008	W94
W8570TJ180	1800	8570	78	0.690	0.050	175	0.008	W89
W8570TJ220	2200	8570	78	0.690	0.050	175	0.008	W89
W8570TE180	1800	8570	78	0.690	0.050	175	0.008	W94
W8570TE220	2200	8570	78	0.690	0.050	175	0.008	W94
W5984TJ360	3600	5984	69	0.758	0.097	160	0.008	W89
W5984TJ400	4000	5984	69	0.758	0.097	160	0.008	W89
W5984TE360	3600	5984	69	0.758	0.097	160	0.008	W94
W5984TE400	4000	5984	69	0.758	0.097	160	0.008	W94
W5139TJ400	4000	5139	61	0.825	0.136	160	0.008	W89
W5139TJ480	4800	5139	61	0.825	0.136	160	0.008	W89
W5139TE400	4000	5139	61	0.825	0.136	160	0.008	W94
W5139TE480	4800	5139	61	0.825	0.136	160	0.008	W94



W89 – 100A368



W82 – 101A395



W94 – 100A372



Certificate FM26085

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



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