

## Module Type

### Diode

#### Maximum Ratings

Symbol	Item	Conditions	Values	Units
$I_D$	Output Current(D.C.)	$T_c=96$ Three phase full wave	200	A
$I_{FSM}$	Surge forward current	$t=10ms, sine, T_{vj} =45$	1900	A
$i^2t$	Circuit Fusing Consideration	$t=10ms, sine, T_{vj} =45$	18050	$A^2s$
$V_{isol}$	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min	3000	V
$T_{vj}$	Operating Junction Temperature		-40 to +150	
$T_{stg}$	Storage Temperature		-40 to +125	
$M_t$	Mounting Torque	To t erminals(M4)	$2 \pm 15\%$	Nm
$M_t$		To terminals(M6)	$5 \pm 15\%$	Nm
$M_s$		To heatsink(M6)	$5 \pm 15\%$	Nm
Weight		Module Approximately	320	g

#### Thermal Characteristics

Symbol	Item	Conditions	Values	Units
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to Case(TOTAL)	0.12	$/W$
$R_{th(c-s)}$	Thermal Impedance, max.	Case to Heat sink	0.06	$/W$

#### Electrical Characteristics



## Thyristor Maximum Ratings

Symbol	Item	Conditions	Values	Units
$I_{TAV}$	Average On-State Current	$T_c=93^\circ\text{C}$ , Single Phase half wave 180° conduction	200	A
$I_{TSM}$	Surge On-State Current			

## Electrical and Thermal Characteristics



Performance Curves

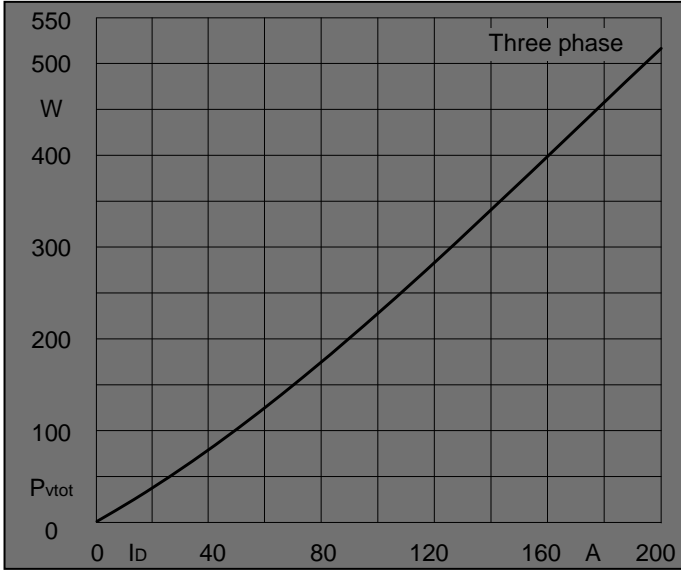


Fig1. Power dissipation

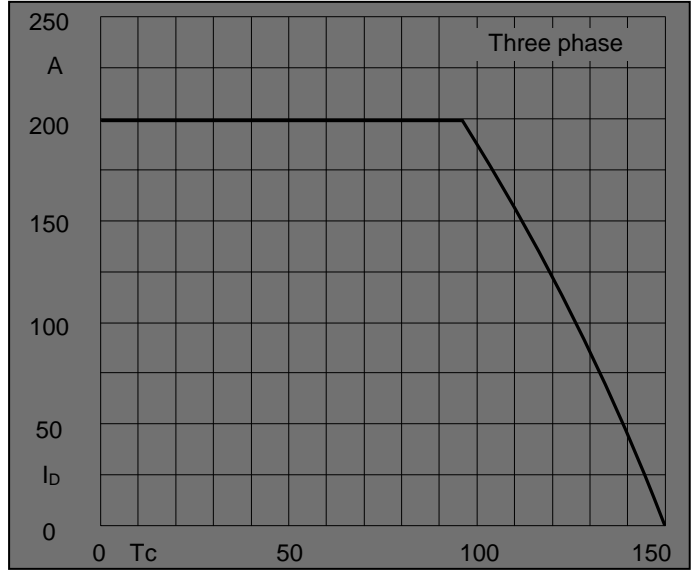


Fig2. Forward Current Derating Curve

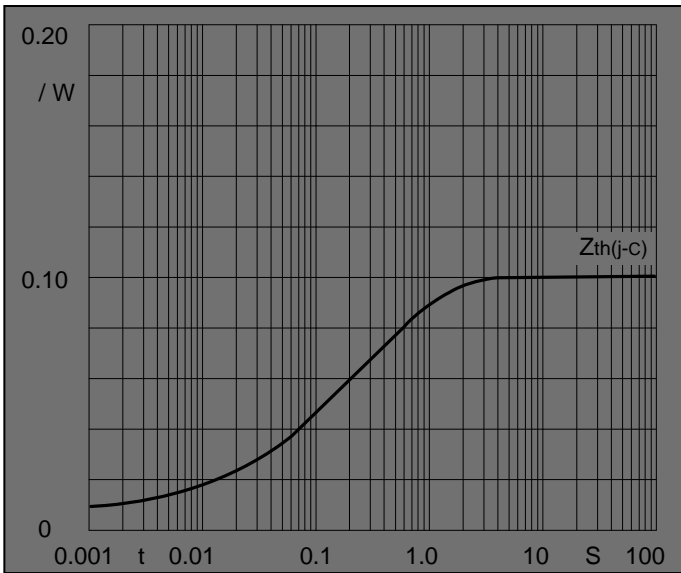


Fig3. Transient thermal impedance

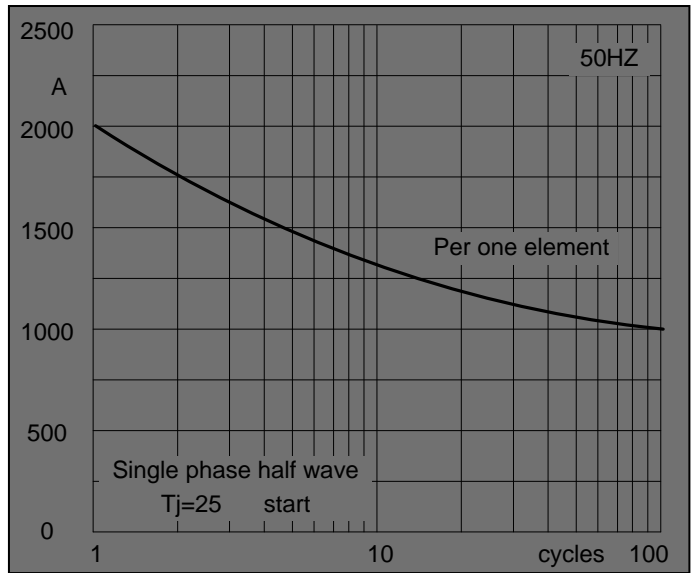


Fig4. Max Non-Repetitive Forward Surge Current

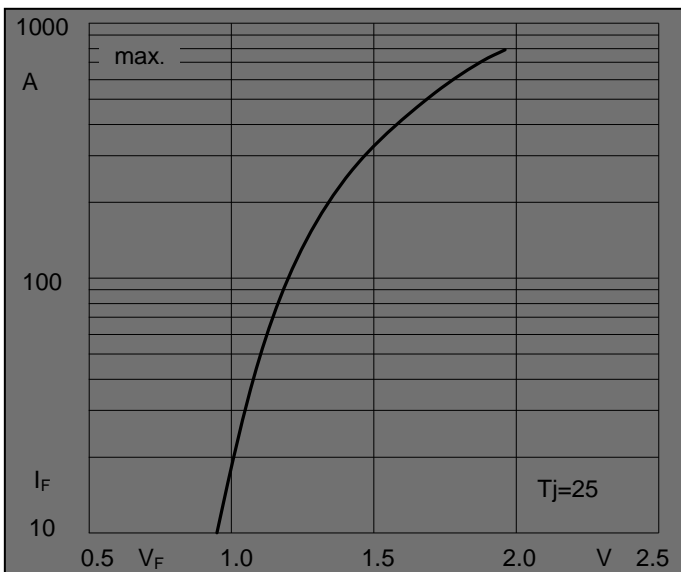


Fig5. Forward Characteristics

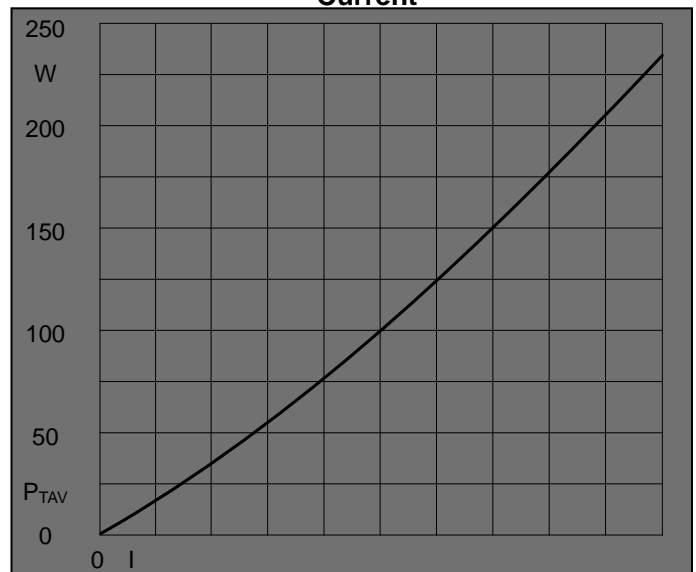
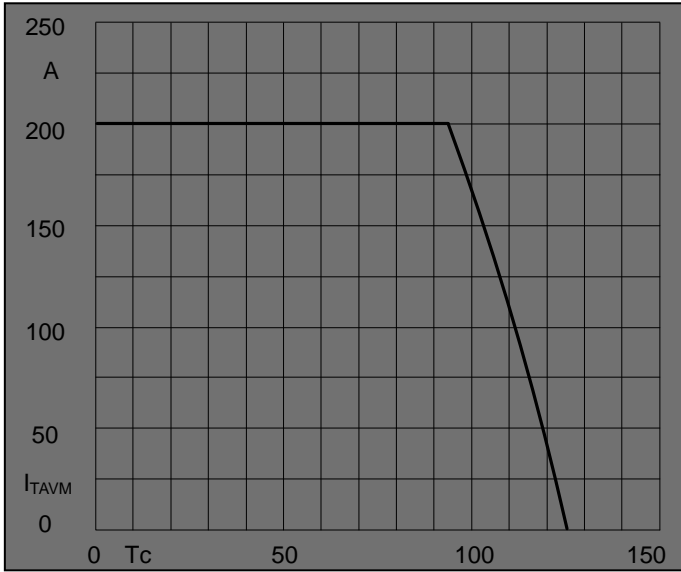
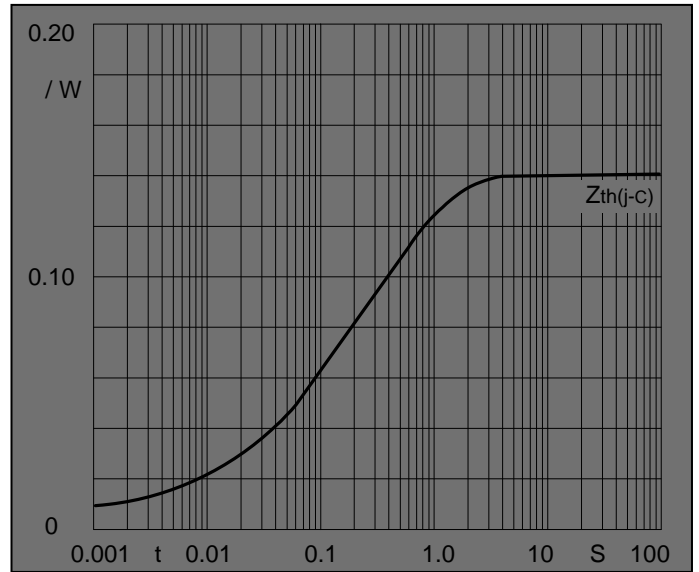


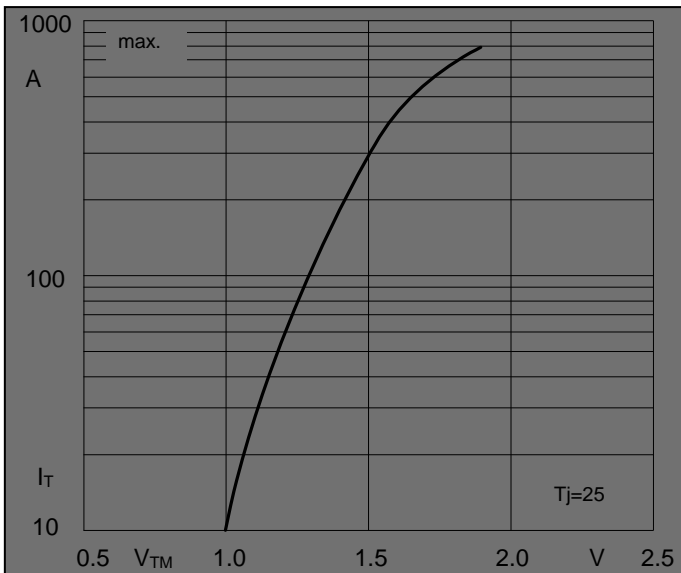
Fig6. SCR Power dissipation



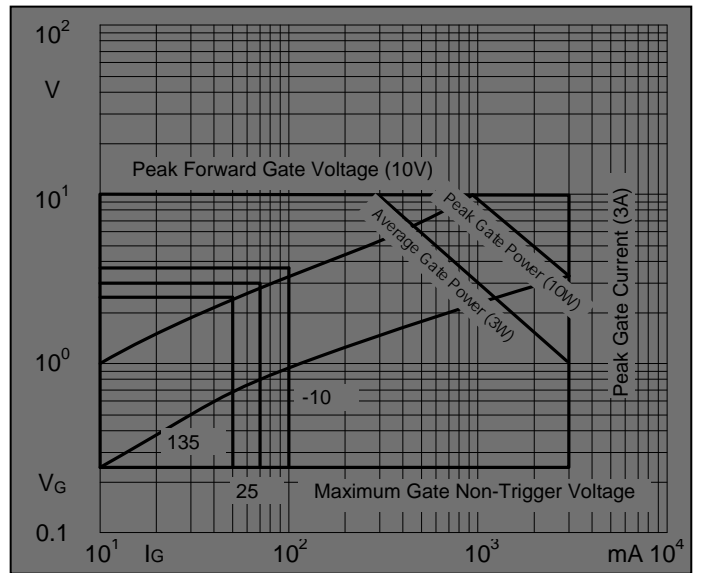
**Fig7. SCR Forward Current Derating Curve**



**Fig8. SCR Transient thermal impedance**



**Fig9. SCR Forward Characteristics**



**Fig10. Gate trigger Characteristics**

