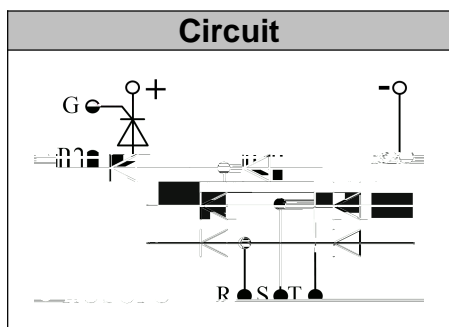


Three Phase Bridge + Thyristor

V_{RRM} / V_{DRM} I ∈ c [F] ∈ EX
I_{FAV} / I_{TAV} G ∈ EE

Features

- Ó [& \ â] * ç [| cæ * ^ k] ∈ c [F] ∈ EX
- V @ ! ^ ^ Ú @ æ • ^ Ó ! ð á * ^ æ } á æ V @ ^ ! á • c []
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Applications

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- Ö ~ ! ! ^ } c • cæ à | ð : ^ á] [, ^ ! • ~]] ^
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Module Type

TYPE	V _{RRM} / V _{DRM}	V _{RSM}
TVG ∈ Ö V E I Š G	I ∈ EX	J ∈ EX
TVG ∈ Ö V F G Š G	F G ∈ EX	F H ∈ EX
TVG ∈ Ö V F I Š G	F I ∈ EX	F I ∈ EX
TVG ∈ Ö V F I Š G	F I ∈ EX	F J ∈ EX

Diode

Maximum Ratings

Symbol	Item	Conditions	Values	Units
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Q Ø Û T	Û ~ ! * ^ - [! , æ ! á & ~ ! ! ^ } c	c M F E { • È • á } ^ È V ç b M I Í	F J ∈ E	Ø
ã c	Ö á ! & ~ æ ç Ø ~ • á } * Ö [] • á á ^ ! æ ç á []	c M F E { • È • á } ^ È V ç b M I Í	F I ∈ E	Ø ° •
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V • c *	Û c [! æ * ^ V ^ {] ^ ! æ ç ~ ! ^		È I ∈ c [È F G I	
T c	T [~ } ç á } * V [! ~ ~ ^	V [c ^ ! { á } æ] • ç T I D	G I F I Ä	P {
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Y ^ á * @ c		T [á ~ ! ^ E]] ! [ç á { æ c ^ ^	H G ∈ E	*

Thermal Characteristics

Symbol	Item	Conditions	Values	Units
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Û c @ ç & È • D	V @ ! ! { æ] Q {] ^ á æ } & ^ È { æ ç È	Ö æ • ^ c [P ^ æ c • á] \	È E I	Ø Y

Electrical Characteristics

Symbol	Item	Conditions	Values	Units
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Q Ü Ü T	Û ^] ^ ç á ç á ç ^ Ú á æ \ Ü ^ ç ^ ! • ^ Ö ~ ! ! ^ } ç È { æ ç È	V ç b M G I X Ü Ø M X Ü Ü T V ç b M F I ∈ X Ü Ø M X Ü Ü T	m G m F ∈	{ Ø { Ø



**Thyristor
Maximum Ratings**

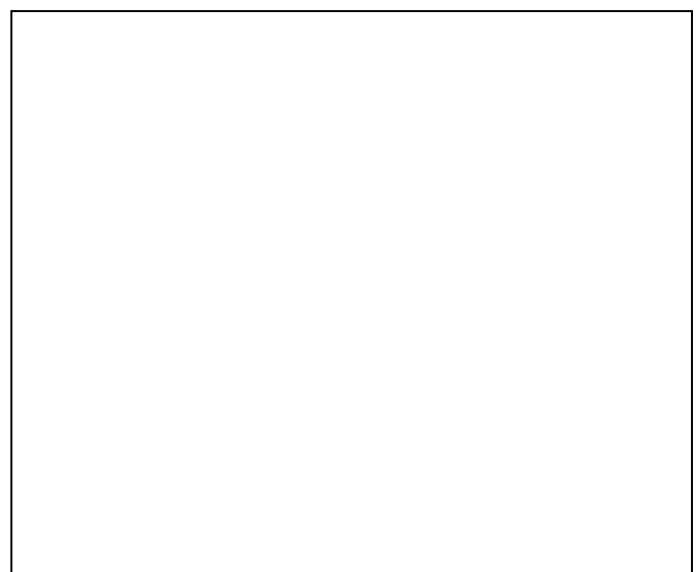
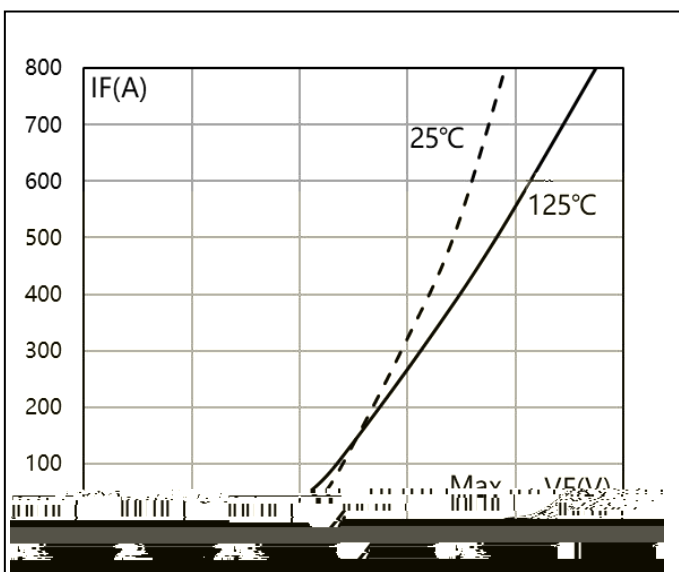
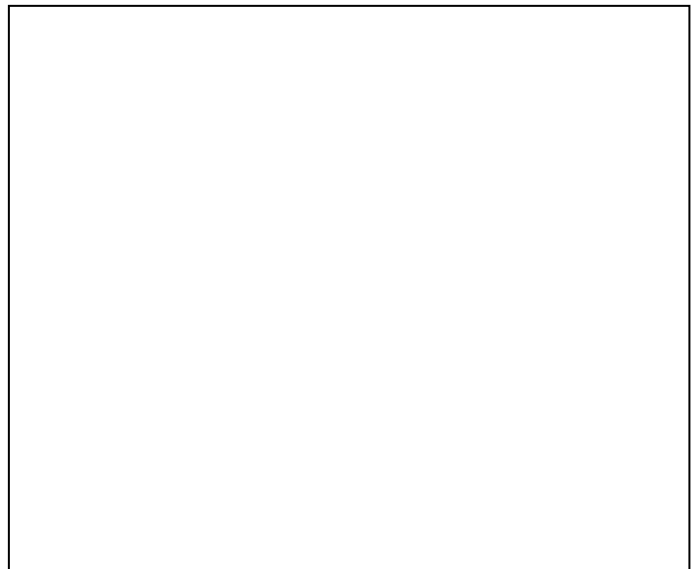
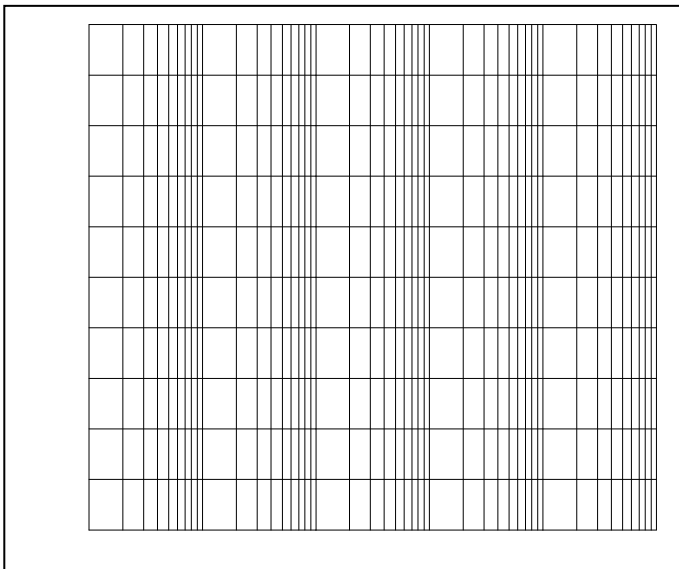
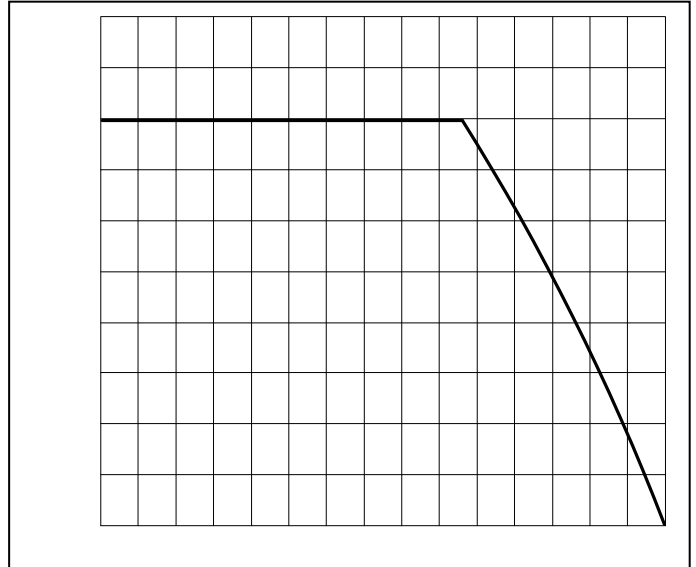
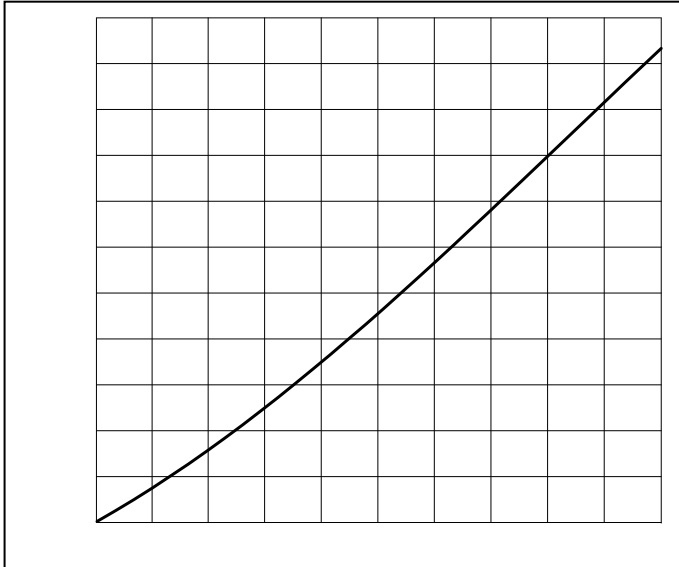
Symbol	Item	Conditions	Values	Units
I_{VCEX}	Maximum collector current (continuous)	$V_{CE} = V_{CE0}$, $I_{VT} = 0$, $T_c = T_{c0}$	1.5 A	A
I_{VUT}	Maximum collector current (transient)	$V_{CE} = V_{CE0}$, $I_{VT} = 0$, $T_c = T_{c0}$	1.5 A	A
I_{c0}	Maximum collector current (average)	$V_{CE} = V_{CE0}$, $I_{VT} = 0$, $T_c = T_{c0}$	0.5 A	A
I_{cM}	Maximum collector current (peak)	$V_{CE} = V_{CE0}$, $I_{VT} = 0$, $T_c = T_{c0}$	1.5 A	A
V_{CB}	Maximum collector-base voltage	$I_{VT} = 0$, $I_{CT} = 0$, $T_c = T_{c0}$	100 V	V
V_{CE}	Maximum collector-emitter voltage	$I_{VT} = 0$, $I_{CT} = 0$, $T_c = T_{c0}$	100 V	V
T_c	Case temperature	$I_{VT} = 0$, $I_{CT} = 0$	100 °C	°C
T_j	Junction temperature	$I_{VT} = 0$, $I_{CT} = 0$	100 °C	°C
I_{T0}	Maximum average thyristor current	$V_{CE} = V_{CE0}$, $I_{VT} = 0$, $T_c = T_{c0}$	0.5 A	A
I_{TM}	Maximum peak thyristor current	$V_{CE} = V_{CE0}$, $I_{VT} = 0$, $T_c = T_{c0}$	1.5 A	A

Electrical and Thermal Characteristics

Symbol	Item	Conditions	Values			Units
			Min.	Typ.	Max.	
V_{GT}	Gate trigger voltage	$V_{CE} = V_{CE0}$, $I_{VT} = 0$, $T_c = T_{c0}$			1.5 V	V
I_{GT}	Gate trigger current	$V_{CE} = V_{CE0}$, $I_{VT} = 0$, $T_c = T_{c0}$			100 mA	mA
V_{X0}	Forward voltage	$I_{VT} = 0$, $I_{CT} = 0$, $T_c = T_{c0}$			1.5 V	V
I_{X0}	Forward current	$V_{CE} = V_{CE0}$, $I_{VT} = 0$, $T_c = T_{c0}$			1.5 A	A
V_{c0}	Collector-base voltage	$I_{VT} = 0$, $I_{CT} = 0$, $T_c = T_{c0}$			100 V	V
V_{cM}	Peak collector-base voltage	$I_{VT} = 0$, $I_{CT} = 0$, $T_c = T_{c0}$			100 V	V
V_{CE0}	Collector-emitter voltage	$I_{VT} = 0$, $I_{CT} = 0$, $T_c = T_{c0}$			100 V	V
V_{CEM}	Peak collector-emitter voltage	$I_{VT} = 0$, $I_{CT} = 0$, $T_c = T_{c0}$			100 V	V



Performance Curves



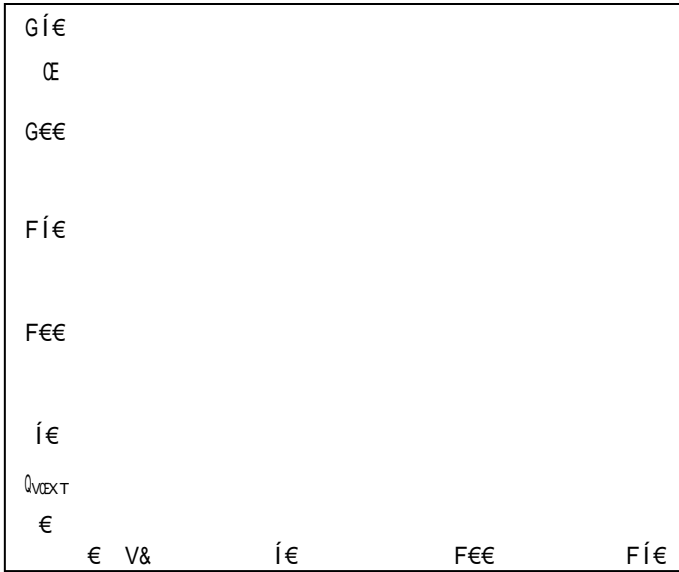


Fig7. SCR Forward Current Derating Curve

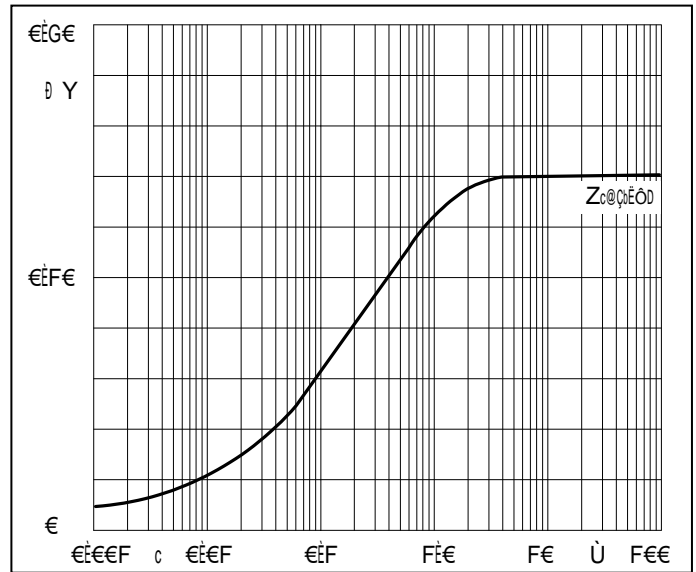


Fig8. SCR Transient thermal impedance

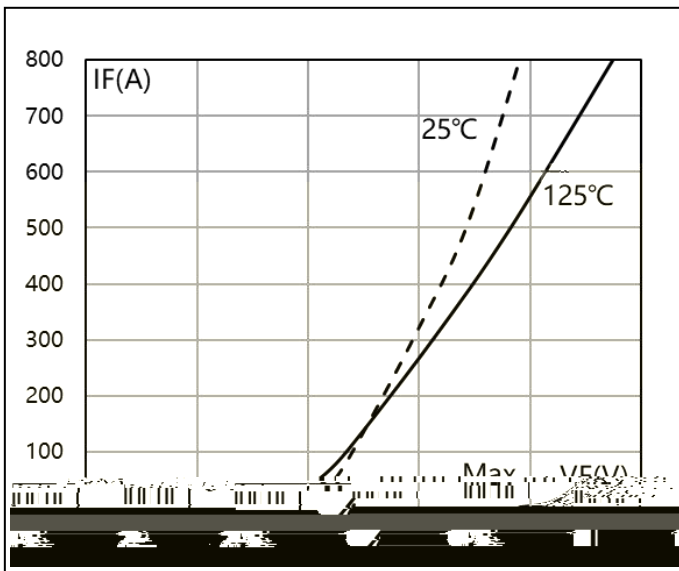


Fig9. SCR Forward Characteristics

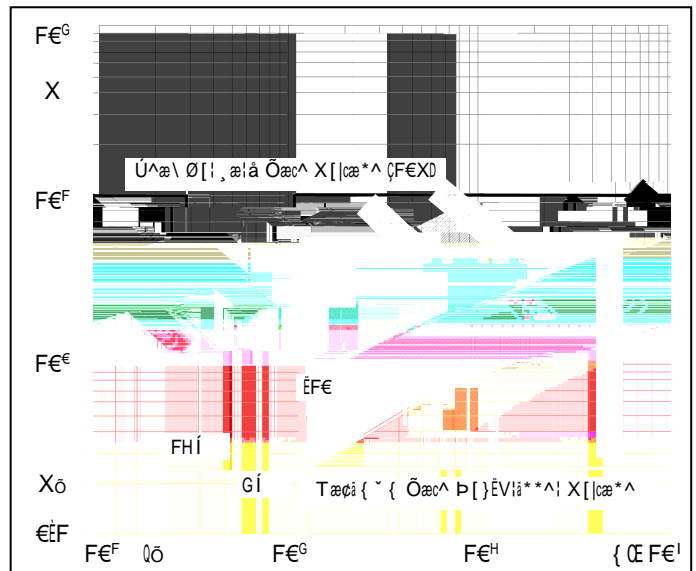


Fig10. Gate trigger Characteristics

