



## Module Type

### <sup>1</sup> Diode

#### Maximum Ratings

Symbol	Item	Conditions	Values	Units
I <sub>D</sub>	Output Current(D.C.)	T <sub>c</sub> =85	60	A
I <sub>FSM</sub>	Surge forward current	t=10mS T <sub>vj</sub> =45	1500	A
i <sup>2</sup> t	Circuit Fusing Consideration		11000	A <sup>2</sup> s
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min	3000	V
T <sub>vj</sub>	Operating Junction Temperature		-40 to +125	
T <sub>stg</sub>	Storage Temperature		-40 to +125	
Mt Ms	Mounting Torque	To terminals(M5)	3±15%	Nm



## 1 Thyristor

### Maximum Ratings

Symbol	Item	Conditions	Values	Units
$I_{TAV}$	Average On-State Current	Sine 180°; $T_c=85$	60	A
$I_{TSM}$	Surge On-State Current	$T_{VJ}=45$ $t=10ms$ , sine $T_{VJ}=125$ $t=10ms$ , sine	1500 1250	A
$i^2t$	Circuit Fusing Consideration	$T_{VJ}=45$ $t=10ms$ , sine $T_{VJ}=125$ $t=10ms$ , sine	11000 8000	A <sup>2</sup> s
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min	3000	V
$T_{vj}$	Operating Junction Temperature		-40 to +125	
$T_{stg}$	Storage Temperature		-40 to +125	
$M_t$	Mounting Torque	To terminals(M5)	3 f15%	Nm
$M_s$		To heatsink(M6)	5 f15%	Nm
$di/dt$	Critical Rate of Rise of On-State Current	$T_{VJ}=T_{VJM}$ , $2/3V_{DRM}$ , $I_G=500mA$ $T_r<0.5\mu s$ , $t_p>6\mu s$	150	A/ $\mu s$
$dv/dt$	Critical Rate of Rise of Off-State Voltage, min.	$T_J=T_{VJM}$ , $2/3V_{DRM}$ linear voltage rise	1000	V/ $\mu s$
a	Maximum allowable acceleration		50	m/s <sup>2</sup>

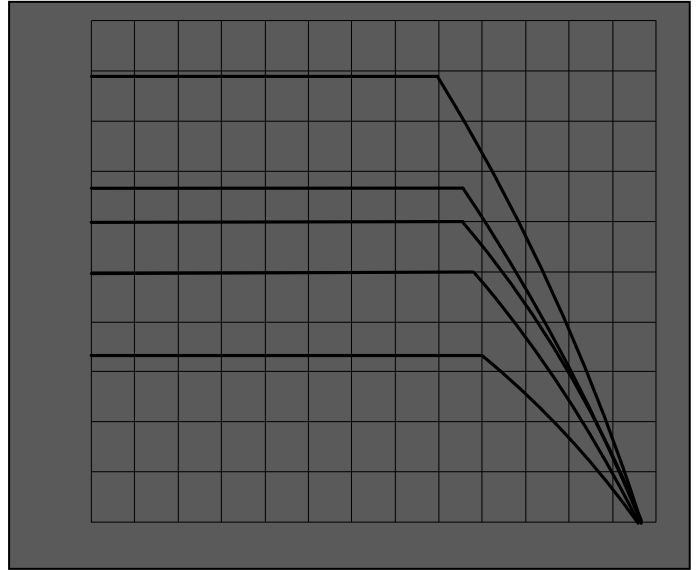
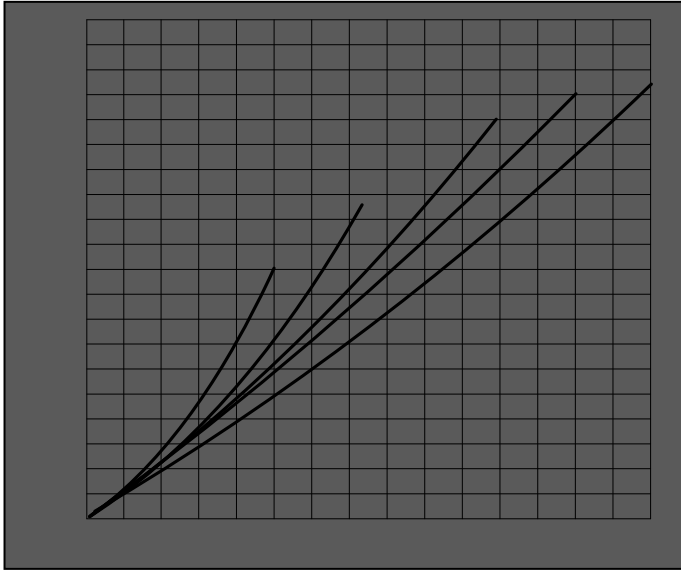
### Thermal Characteristics

Symbol	Item	Conditions	Values	Units
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to Case	0.57	/W
$R_{th(c-s)}$	Thermal Impedance, max.	Case to Heatsink	0.20	/W

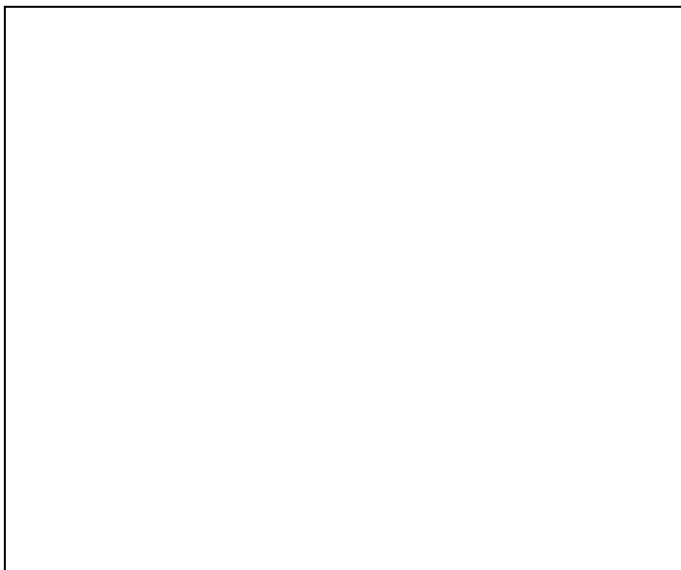
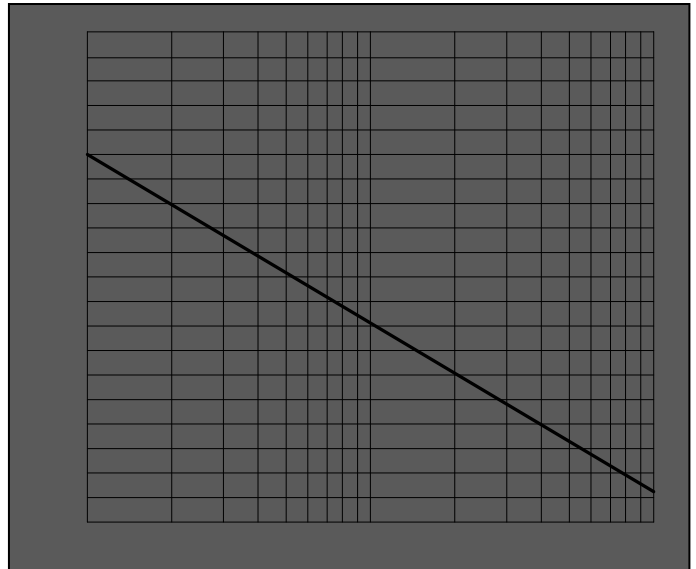
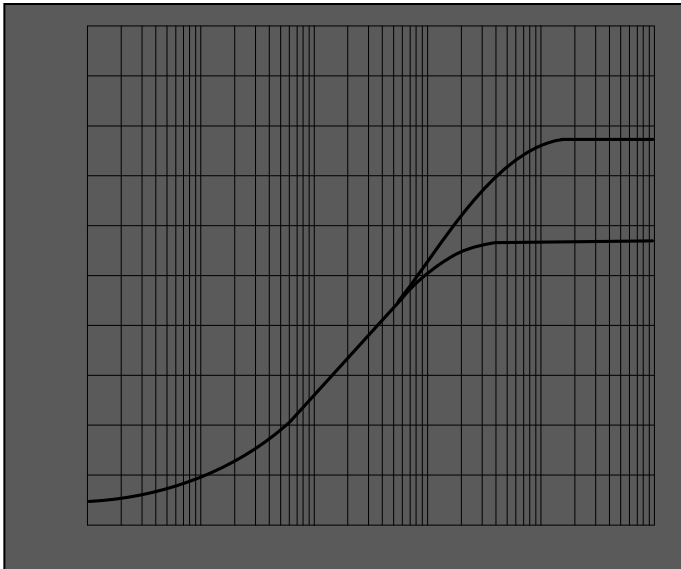
### Electrical Characteristics



## Performance Curves



Fig







Packing Standard

Item	Length: A (mm)	Width: B (mm)	Height: C (mm)	Quantity (PCS)
Inner Box				

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