



MT90CB-T1



Thyristor Maximum Ratings

Symbol	Item	Conditions	Values	Units
I_{TAV}	Average On-State Current	Sine 180°; $T_c=85$	90	A
I_{TSM}	Surge On-State Current	$T_{VJ}=45$ t=10ms, sine $T_{VJ}=125$ t=10ms, sine	2000 1750	A
i^2t	Circuit Fusing Consideration	$T_{VJ}=45$ t=10ms, sine $T_{VJ}=125$ t=10ms, sine	20000 15000	A2s
Visol	Isolation Breakdown Voltage(R.M.S)	a.c.50HZ;r.m.s.;1min	3000	V
T_{vj}	Operating Junction Temperature		-40 to +130	
T_{stg}	Storage Temperature		-40 to +125	
M_t	Mounting Torque	To terminals(M5)	$3 \pm 15\%$	Nm
M_s		To heatsink(M6)	$5 \pm 15\%$	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/ μs
dv/dt	Critical Rate of Rise of Off-State Voltage, min.	$T_J=T_{VJM}$, $2/3V_{DRM}$ linear voltage rise	1000	V/ μs
a	Maximum allowable acceleration		50	m/s^2

Thermal Characteristics

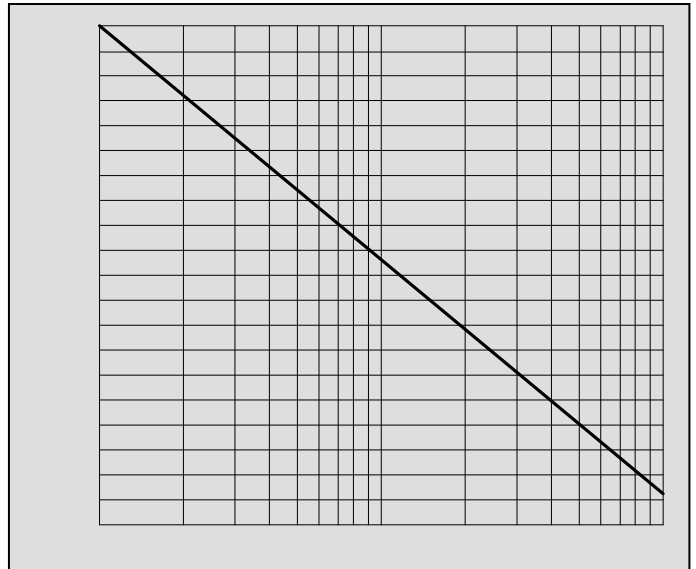
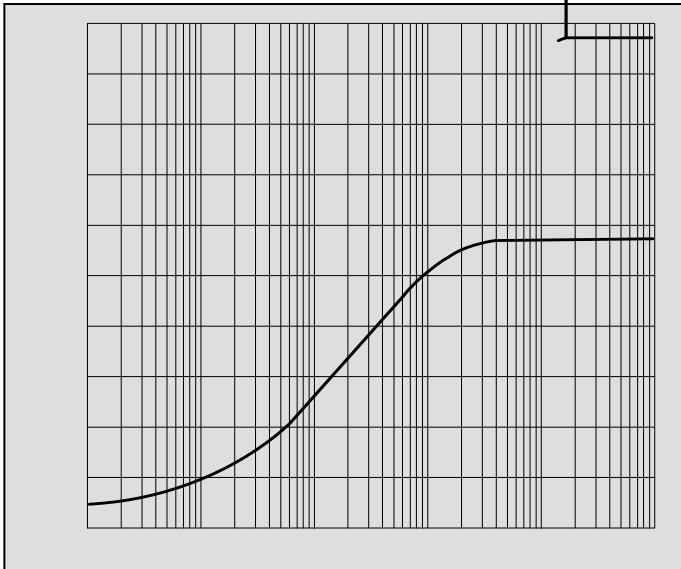
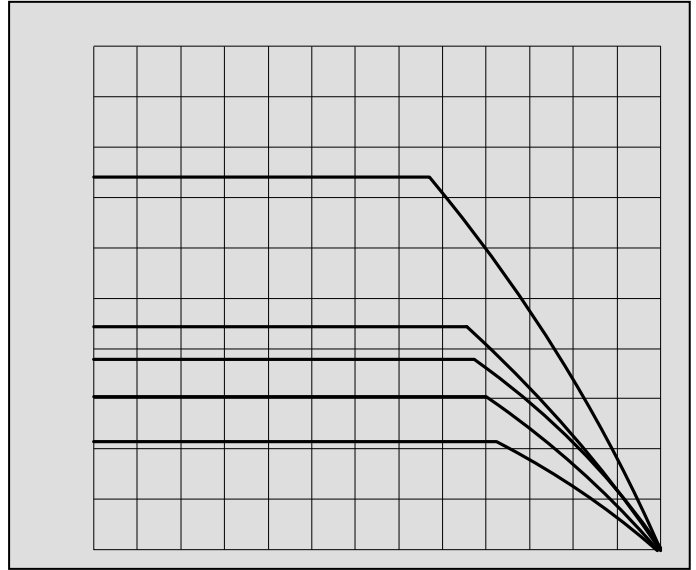
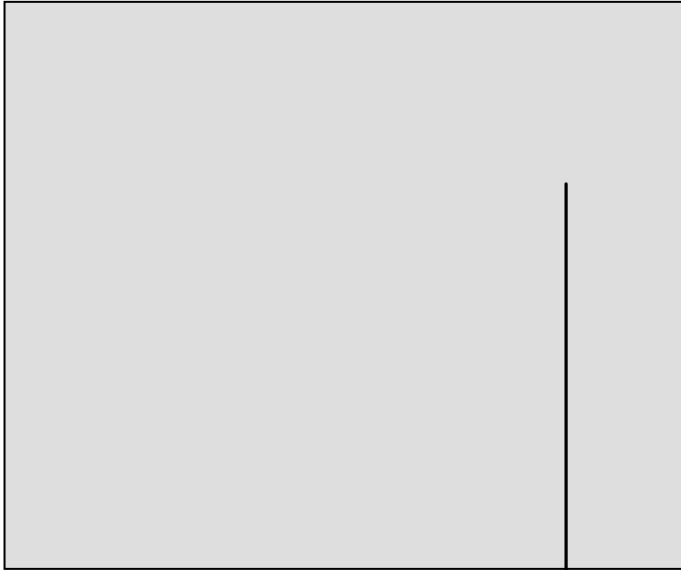
Symbol	Item	Conditions	Values	Units
$R_{th(j-c)}$	Thermal Impedance, max.	Junction to Case	0.28	$^{\circ}W$
$R_{th(c-s)}$	Thermal Impedance, max.	Case to Heatsink	0.20	$^{\circ}W$

Electrical Characteristics

Symbol	Item			



Performance Curves





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COMPLIANT



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