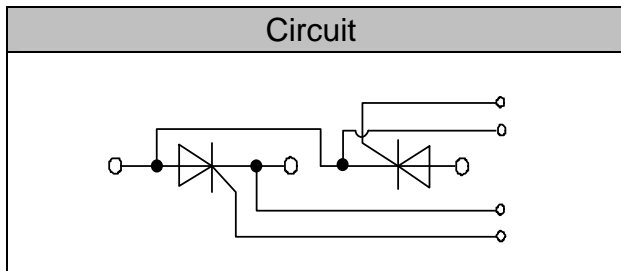


Thyristor Modules

V_{RRM} / V_{DRM} 800 to 1800V
I_{TAV} 60A

Applications

- y Power Converters
- y Lighting Control
- y DC Motor Control and Drives
- y Heat and temperature control



Features

- y International standard package
- y High Surge Capability
- y Glass passivated chip
- y Simple Mounting
- y Heat transfer through aluminum oxide DBC ceramic isolated metal baseplate
- y UL recognized applied for file no. E360040

Module Type

TYPE	V _{RRM}	V _{RSM}
MT60C08T1	800V	900V
MT60C12T1	1200V	1300V
MT60C16T1	1600V	1700V
MT60C18T1	1800V	1900V

Maximum Ratings

Symbol	Conditions	Values	Units
I _{TAV}	Sine 180°;T _c =85	60	A
I _{TSM}	T _{VJ} =45 t=10ms, sine	1500	A
	T _{VJ} =125 t=10ms, sine	1250	
i ² t	T _{VJ} =45 t=10ms, sine	11000	A ² s
	T _{VJ} =125 t=10ms, sine	8000	
Visol	a.c.50HZ;r.m.s.;1min	3000	V
T _{vj} 15%	Nm	-40 to 125	°C

Ms	To heatsink(M6)	5 f 15%	Nm
di/dt	T _{VJ} = T _{VJM} , 2/3V _{DRM} ,I _G =500mA Tr<0.5us,tp>6us	150	A/us
dv/dt	T _J = T _{VJM} ,2/3V _{DRM} , linear voltage rise	1000	V/us
a	Maximum allowable acceleration	50	m/s ²
Weight	Module(Approximately)	100	g

Thermal Characteristics

Symbol	Conditions	Values	Units
R _{th(j-c)}	per thyristor / per module	0.57/0.29	/W
R _{th(c-s)}	per thyristor / per module	0.2/0.1	/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V_{TM}	$T=25 \quad I_{TM}=200A$			1.65	V
I_{RRM}/I_{DRM}	$T_{VJ}=T_{VJM}, V_R=V_{RRM}, V_D=V_{DRM}$			15	mA
V_{TO}	For power-loss calculations only ($T_{VJ}=125$)			0.9	V
r_T	$T_{VJ}=T_{VJM}$			3.5	m
V_{GT}	$T_{VJ}=25, V_D=6V$			3.0	V
I_{GT}	$T_{VJ}=25, V_D=6V$			150	mA
V_{GD}	$T_{VJ}=125, V_D=2/3V_{DRM}$			0.25	V
I_{GD}	$T_{VJ}=125, V_D=2/3V_{DRM}$			6	mA
I_L	$T_{VJ}=25, R_G=33$		300	600	mA
I_H	$T_{VJ}=25, V_D=6V$		150	250	mA
tgδ	$T_{VJ}=25, I_G=1A, di_G/dt=1A/us$		1		us
tq	$T_{VJ}=T_{VJM}$		80		us

Performance Curves

