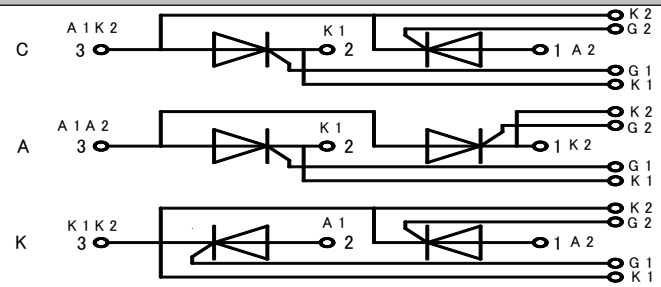
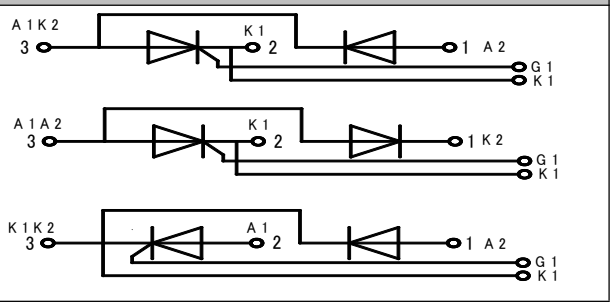
Applications

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

Features

- International standard package
- High Surge Capability
- Simple Mounting

Internal Circuit

C(A/K)	C(A/K)B
	

Blocking - Off State

TYPE		V_{DRM}/V_{RRM}	V_{DSM}/V_{RSM}	Units
MT800C(A/K)12T8	MT800C(A/K)B12T8	1200	1400	V
MT800C(A/K)14T8	MT800C(A/K)B14T8	1400	1600	V
MT800C(A/K)16T8	MT800C(A/K)B16T8	1600	1800	V
MT800C(A/K)18T8	MT800C(A/K)B18T8	1800	2000	V

Maximum Ratings

Symbol	Conditions	Values	Units
I_{TAV}	Sine 180°;Tc=75℃	800	A
	Sine 180°;Tc=95℃	500	A
I_{TSM}	T_{VJ}=125℃ t=10ms, sine	22000	A
I^2t	T_{VJ}=125℃ t=10ms, sine	2420000	A^2s
Visol	a.c.50HZ;r.m.s.;1min,I_{iso}:2mA(MAX)	2500	V
Tvj		-40 to 125	℃
Tstg		-40 to 125	℃
Mt	To terminals(M12)	12±15%	Nm
Ms	To heatsink(M8)	10±15%	Nm
di/dt	T_{VJ}= T_{VJM} ,V_{DM}≤2/3V_{DRM}， I_{GM}=1.5A t_r≤1.5μs	100	A/μs
dv/dt	T_{VJ}= T_{VJM} ,2/3V_{DRM}, linear voltage rise	1000	V/μs
Weight	Module(Approximately)	3210	g

Thermal Characteristics

Symbol	Conditions	Values	Units
Rth(j-c)	per chip	0.048	℃/W
Rth(c-h)	per chip	0.024	℃/W

Electrical Characteristics

Symbol	Conditions	Values			Units
		Min.	Typ.	Max.	
V_{TM}	T=25℃ I_{TM} =2400A			1.65	V
I_{RRM}/I_{DRM}	T_{VJ} =T_{VJM} ,V=V_{RRM} ,V=V_{DRM}			65	mA
V_{TO}	T_{VJ} =T_{VJM}			0.79	V
r_T	T_{VJ} =T_{VJM}			0.28	mΩ
V_{GT}	T_{VJ} =25℃ , V_D =12V, R_L= 3 Ω	0.8		2.5	V
I_{GT}	T_{VJ} =25℃ , V_D =12V, R_L= 3 Ω	30		150	mA
I_L	T_{VJ} =25℃ , V_D =12V, R_L= 3 Ω			1000	mA
I_H	T_{VJ} =25℃ , V_D =12V, R_L= 3 Ω	20		150	mA
V_{GD}	T_{VJ} =T_{VJM} , V_{DM} =67%V_{DRM}	0.2			V

Performance Curves

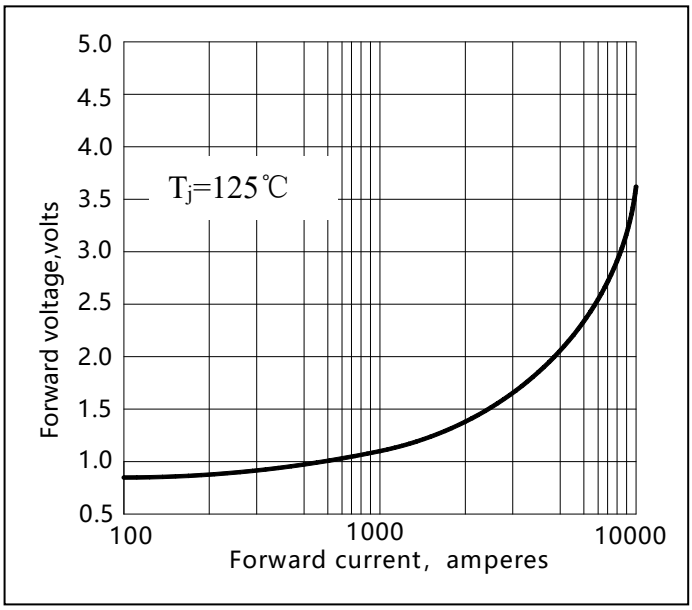


Fig1. Peak On-state Voltage Vs Peak On-state

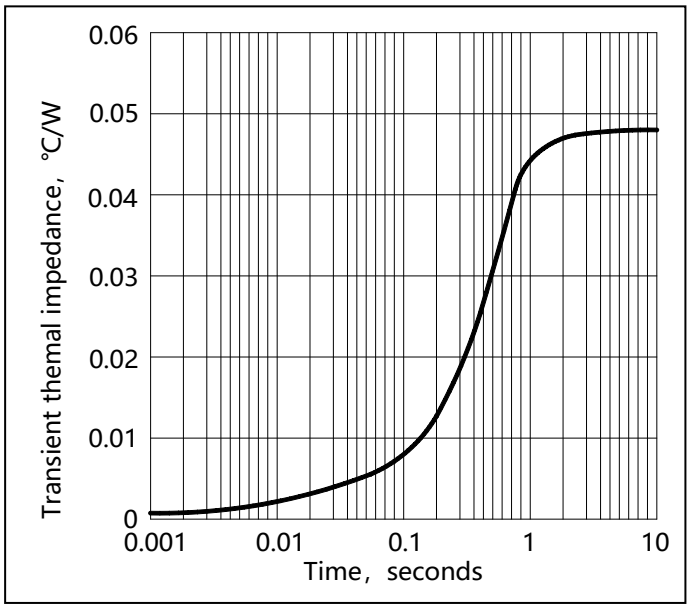


Fig2. Max. junction To case Thermai Impedance Vs Time

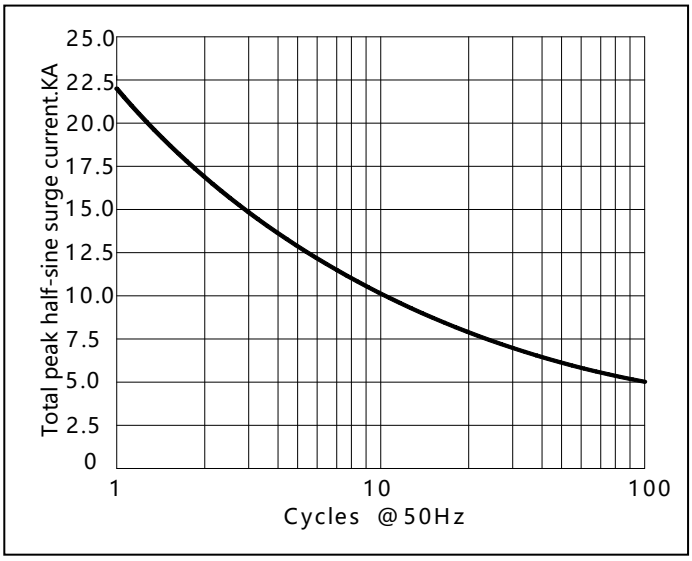


Fig3. Surge Current Vs Cycles

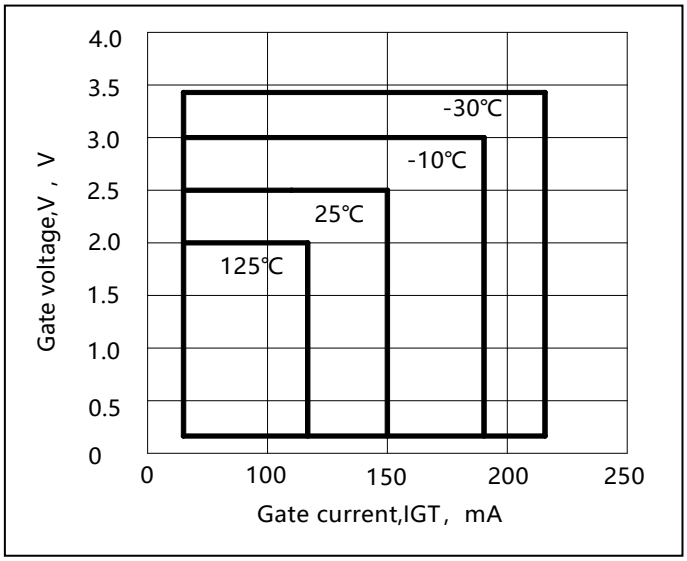


Fig4. Gate Trigger Zone Vs temperature

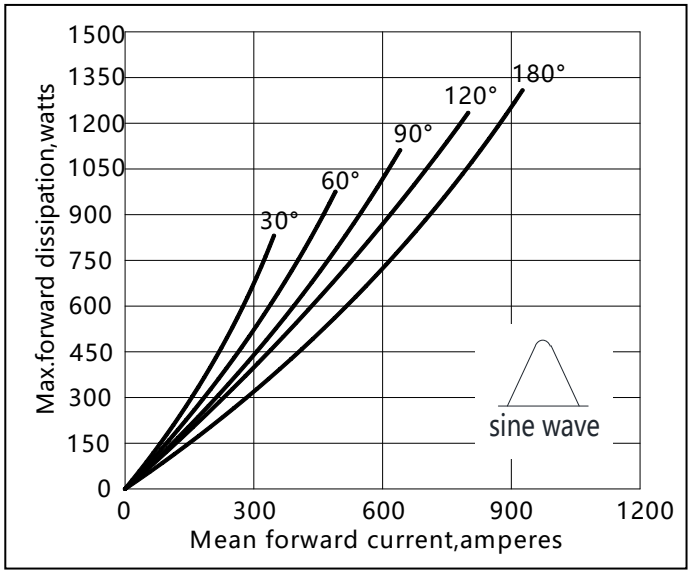


Fig5. Max. Power Dissipation Vs Mean On-state Current

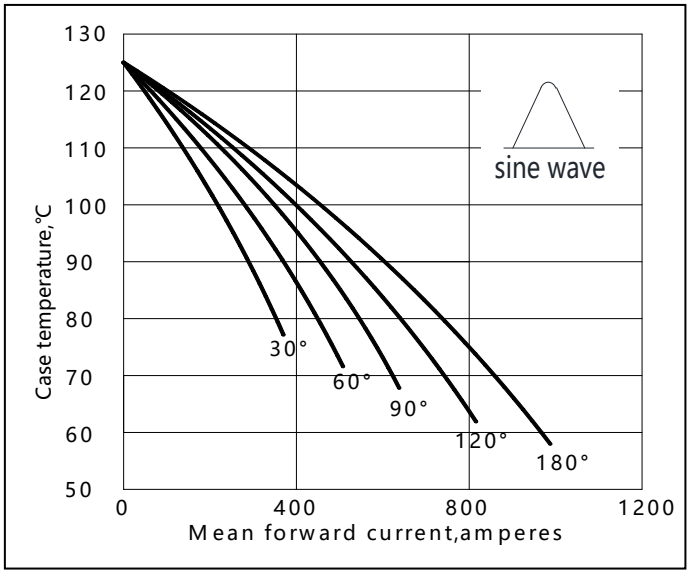
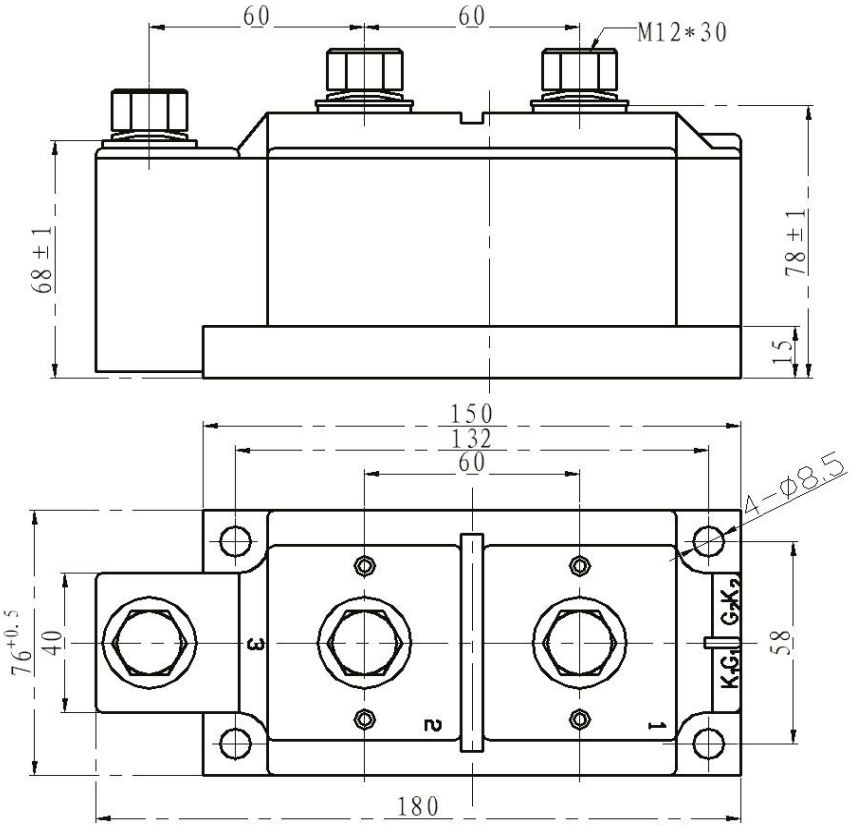


Fig6. Max case Temperature Vs Mean On-state Current

Package Outline Information

CASE:T8



Dimensions in mm
Unmarked dimensional tolerance：±0.5mm