

Features

- Center amplifying gate
- Metal case with ceramic insulator
- Low on-state and switching losses

Typical Applications

- AC controllers
- DC and AC motor control
- Controlled rectifiers

品名： FH1000T**C

$I_{T(AV)}$	1000A
V_{DRM}, V_{RRM}	1200V 1400V
	1600V 1800V



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_J(^{\circ}C)$	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled	125			1000	A
						780	
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$t_p=10ms$	125	1200		1800	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			60	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			14	kA
I^2t	I^2t for fusing coordination	$V_R=0.6V_{RRM}$				980	$A^2s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.82	V
r_T	On-state slope resistance					0.34	m Ω
V_{TM}	Peak on-state voltage	$I_{TM}=1570A, F=15kN$	25			1.65	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=0.67V_{DRM}$	125			1000	V/ μs
di/dt	Critical rate of rise of on-state current	$V_{DM}=67\%V_{DRM}$ Gate pulse $t_r \leq 0.5\mu s$ $I_{GM}=1.5A$	125			150	A/ μs
I_{GT}	Gate trigger current	$V_A=12V, I_A=1A$	25	35		300	mA
V_{GT}	Gate trigger voltage			0.8		2.5	V
I_H	Holding current			20		250	mA
t_q	Turn-off time	$I_T=800A, V_R=50V, dv/dt=20V/\mu s,$ $V_{DRM}=1/2$ Rated	125		150		μs
V_{GD}	Non-trigger gate voltage	$V_{DM}=0.67V_{DRM}$	125	0.3			V
$R_{th(j-c)}$	Thermal resistance Junction to case	DC, double side cooled Clamping force 15kN				0.035	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heatsink					0.008	
F_m	Mounting force			10		20	kN
T_{stg}	Stored temperature			-40		140	$^{\circ}C$
W_t	Weight				150		g
Outline	P04						

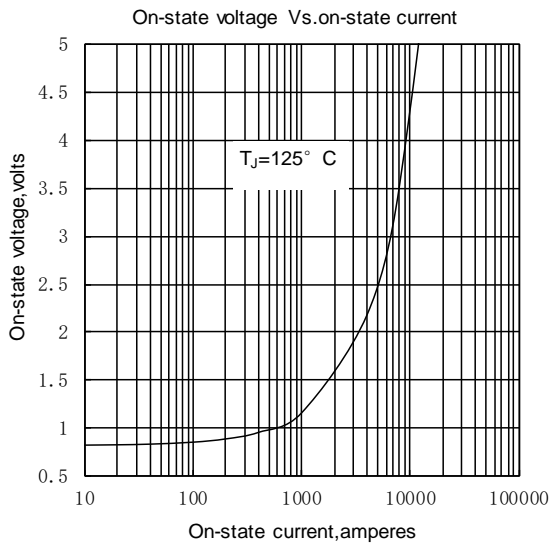


Fig.1

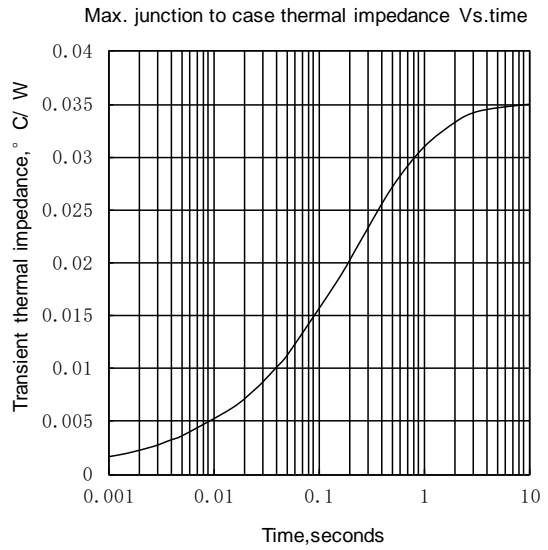


Fig.2

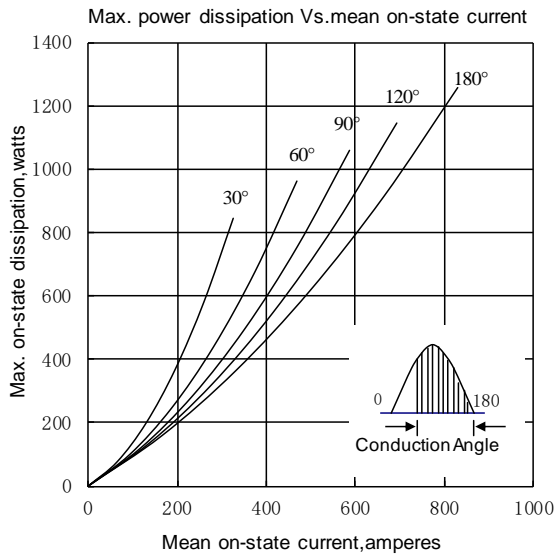


Fig.3

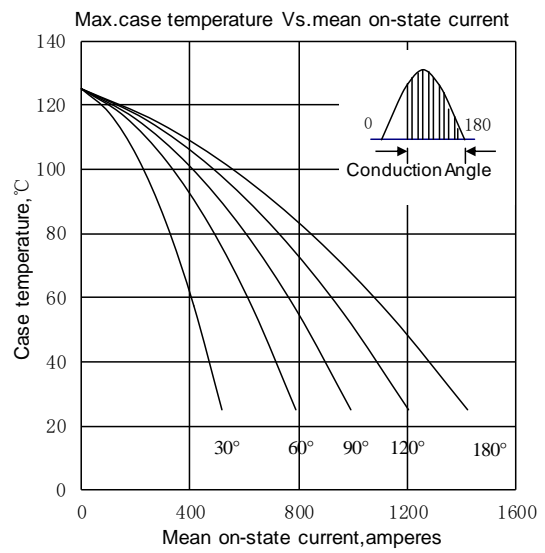


Fig.4

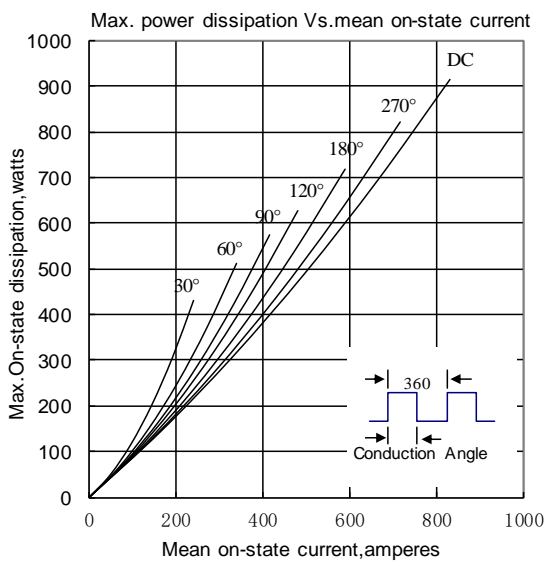


Fig.5

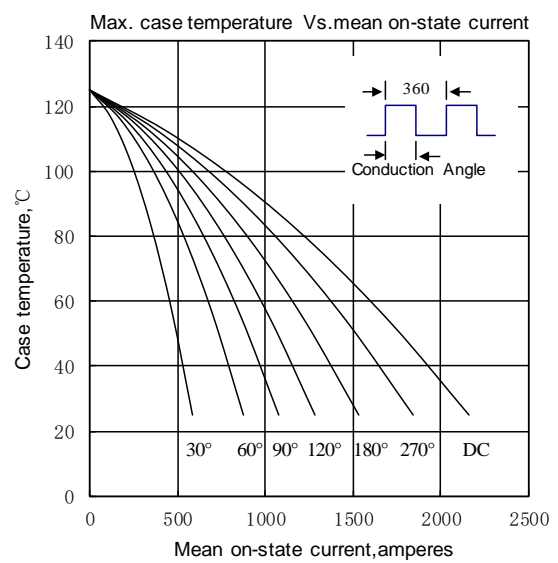


Fig.6

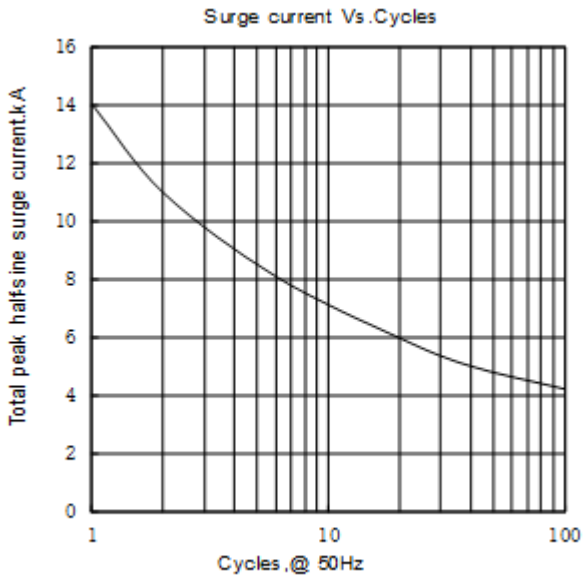


Fig.7

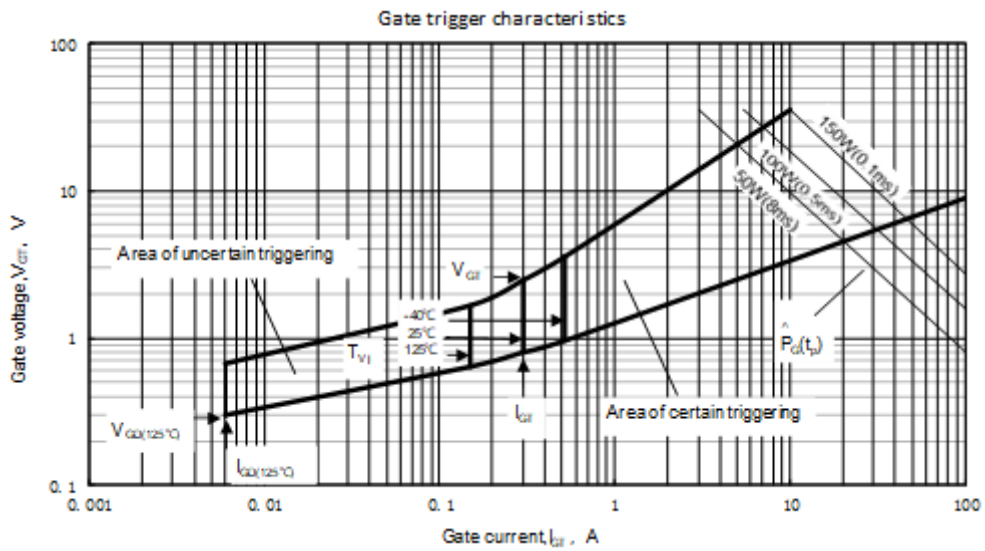
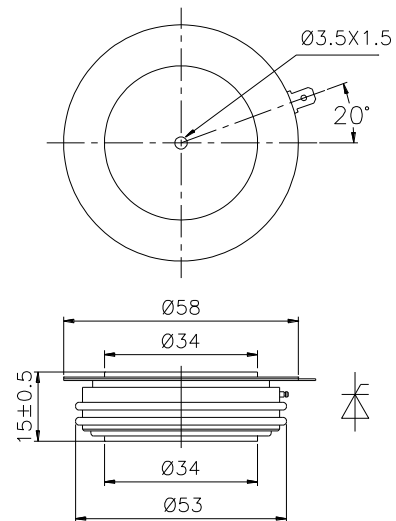


Fig.8



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