

**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: FH300T\*\*

$I_{T(AV)}$             **300A**  
 $V_{DRM}, V_{RRM}$     **8000V**  
                               **8500V**



SYMBOL	CHARACTERISTIC	TEST CONDITIONS		$T_j(^{\circ}\text{C})$	VALUE			UNIT
					Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Double side cooled	$T_c=70^{\circ}\text{C}$	125			300	A
$I_{DRM}$ $I_{RRM}$	Repetitive peak current	at $V_{DRM}$ $t_p=10\text{ms}$ at $V_{RRM}$ $t_p=10\text{ms}$		125			200	mA
$I_{TSM}$	Surge on-state current	10ms half sine wave $V_R=0.6V_{RRM}$		125			4.0	kA
$I^2t$	$I^2t$ for fusing coordination						80	$\text{A}^2\text{s}\cdot 10^3$
$V_{TO}$	Threshold voltage			125			1.70	V
$r_T$	On-state slope resistance						2.10	m $\Omega$
$V_{TM}$	Peak on-state voltage	$I_{TM}=500\text{A}$ , $F=15\text{kHz}$		25			2.80	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM}=0.67V_{DRM}$		125			2000	V/ $\mu\text{s}$
di/dt	Critical rate of rise of on-state current	$V_{DM}=67\%V_{DRM}$ , Gate pulse $t_r \leq 0.5\mu\text{s}$ $I_{GM}=1.5\text{A}$		125			100	A/ $\mu\text{s}$
$Q_{rr}$	Recovery charge	$I_{TM}=2000\text{A}$ , $t_p=4000\mu\text{s}$ , $di/dt=-5\text{A}/\mu\text{s}$ , $V_R=50\text{V}$		125		1500		$\mu\text{C}$
$I_{GT}$	Gate trigger current			25	40		300	mA
$V_{GT}$	Gate trigger voltage	$V_A=12\text{V}$ , $I_A=1\text{A}$			0.8		3.0	V
$I_H$	Holding current				20		200	mA
$V_{GD}$	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					0.045	$^{\circ}\text{C}/\text{W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink						0.0075	$^{\circ}\text{C}/\text{W}$
$F_m$	Mounting force				10	15	20	kN
$T_{stg}$	Stored temperature				-40		140	$^{\circ}\text{C}$
$W_t$	Weight					300		g
<b>Outline</b>	P23							

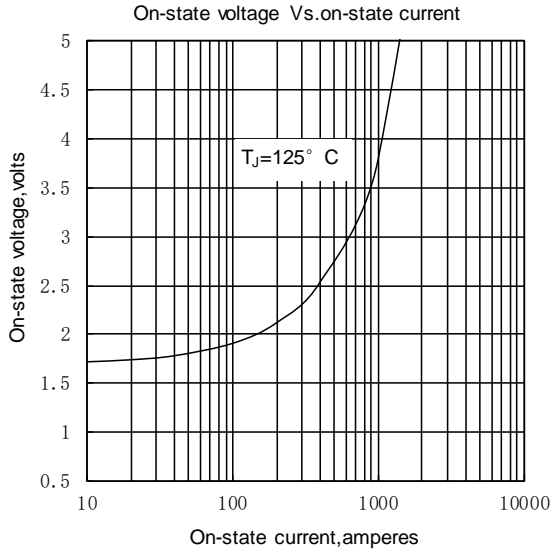


Fig.1

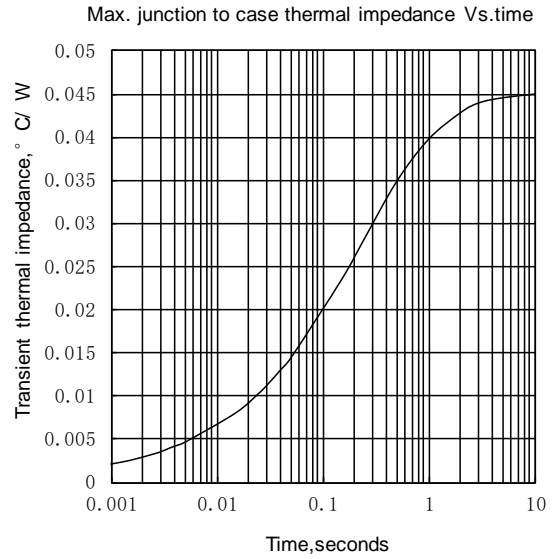


Fig.2

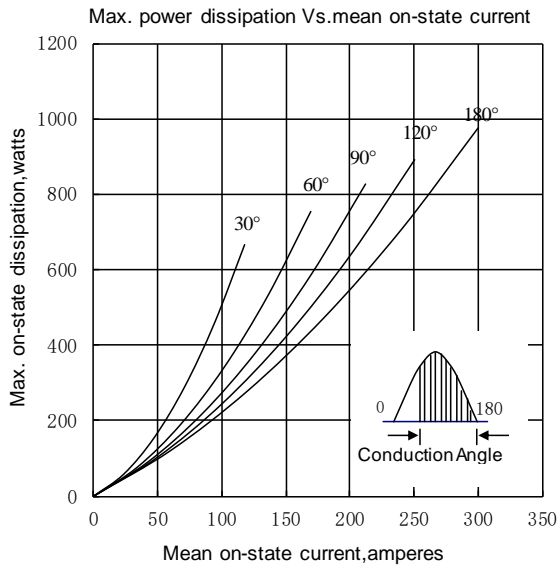


Fig.3

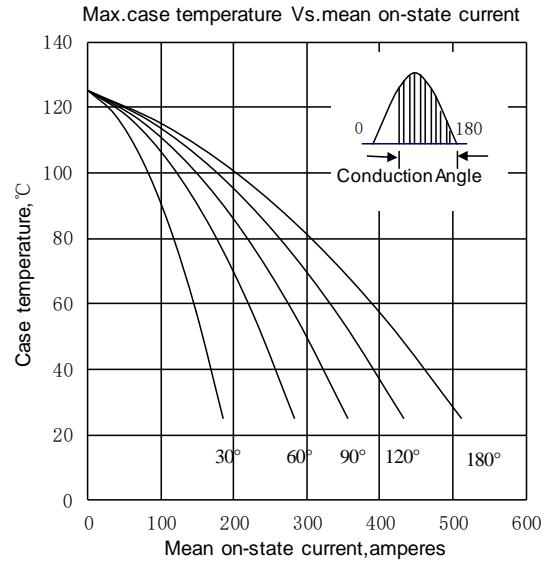


Fig.4

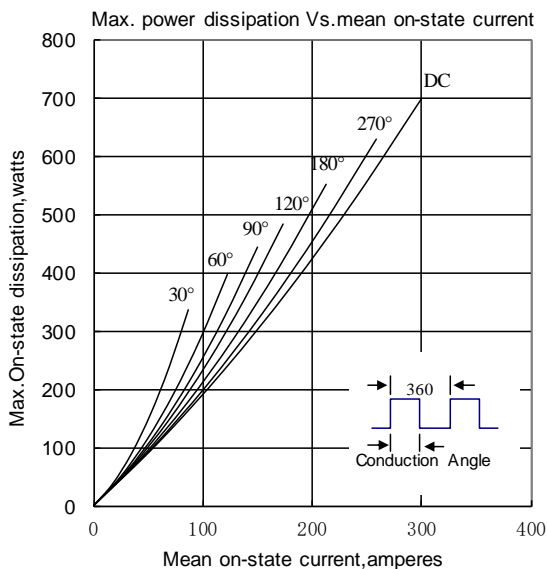


Fig.5

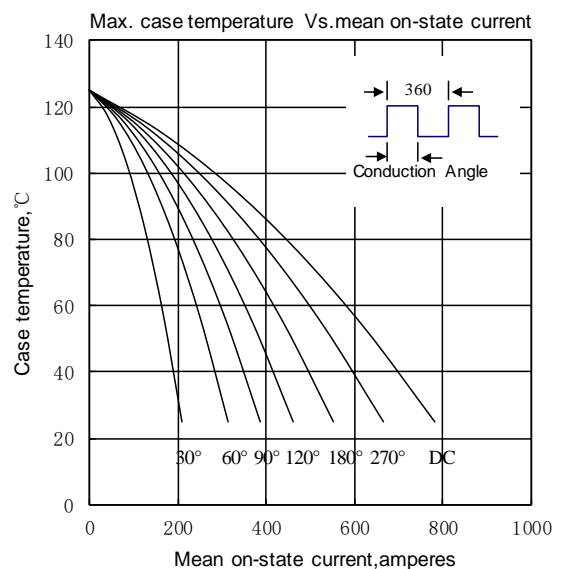


Fig.6

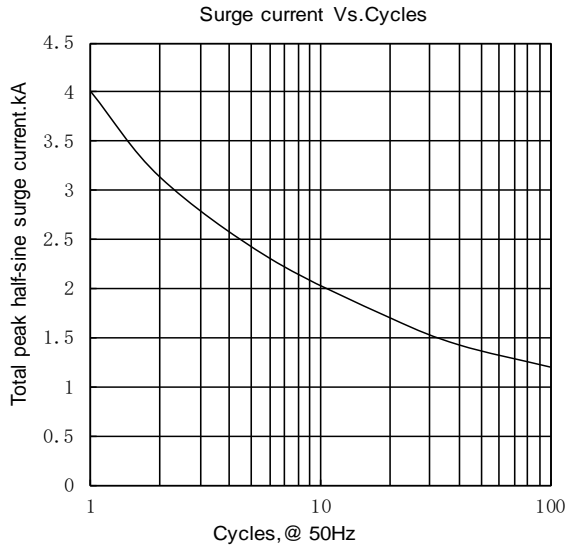


Fig.7

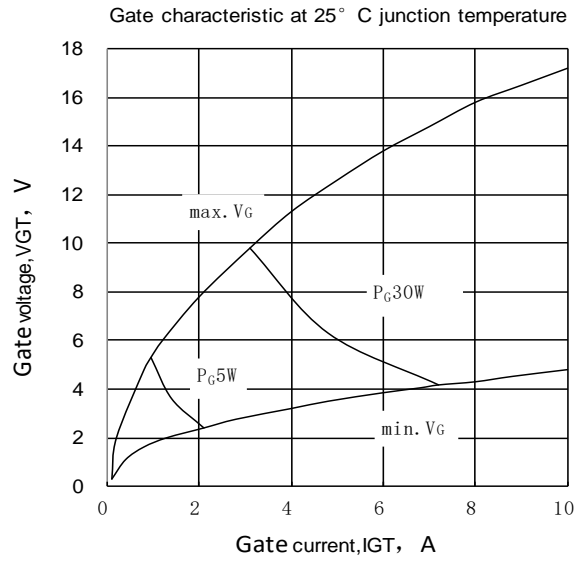


Fig.8

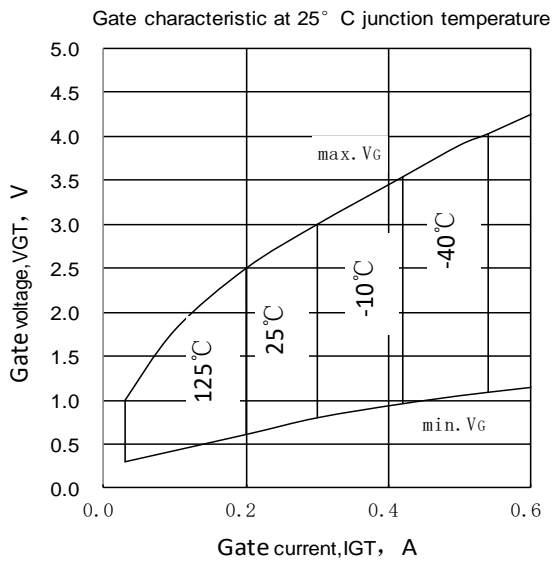
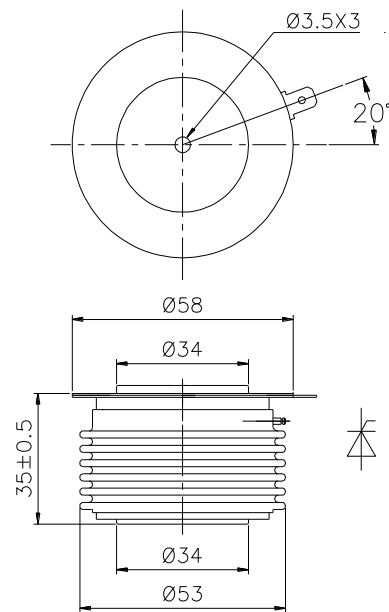


Fig.9



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