

**Features:**

- Isolated mounting base 2500V~
- Pressure contact technology with increased power cycling capability
- Space and weight savings

**Typical Applications**

- Inverter
- Inductive heating
- Chopper

$I_{T(AV)}$  75 A  
 $V_{DRM} / V_{RRM}$  600~1600 V  
 $I_{TSM}$  1.60 A  $\times 10^3$   
 $I^2t$  13 A $^2$  S  $\times 10^3$



SYMBOL	CHARACTERISTIC	TEST CONDITIONS	$T_j$ (°C)	VALUE			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, $T_c=85^\circ C$	115			75	A
$I_{T(RMS)}$	RMS on-state current		115			118	A
$V_{DRM}$ $V_{RRM}$	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} \& V_{RRM}$ tp=10ms $V_{DSM} \& V_{RSM} = V_{DRM} \& V_{RRM} + 100V$ respectively	115	600		1600	V
$I_{DRM}$ $I_{RRM}$	Repetitive peak current	at $V_{DRM}$ at $V_{RRM}$	115			30	mA
$I_{TSM}$	Surge on-state current	10ms half sine wave	115			1.60	KA
$I^2t$	$I^2T$ for fusing coordination	$V_R=60\%V_{RRM}$				13	A $^2$ s $\times 10^3$
$V_{TO}$	Threshold voltage		115			0.85	V
$r_T$	On-state slop resistance					4.88	mΩ
$V_{TM}$	Peak on-state voltage	$I_{TM}=225A$	25			2.20	V
$dv/dt$	Critical rate of rise of off-state voltage	$V_{DM}=67\%V_{DRM}$	115			800	V/μs
$di/dt$	Critical rate of rise of on-state current	Gate source 1.5A $t_r \leq 0.5\mu s$ Repetitive	115			200	A/μs
$t_q$	Circuit commutated turn-off time	$I_{TM}= 75 A, tp=1000\mu s, V_R = 50V$ $dv/dt=30V/\mu s, di/dt=-20A/\mu s$	115	15		35	μs
$t_{rr}$	Reverse recovery time	$I_{FM}=75A, tp=1000\mu s,$ $-di/dt=20A/\mu s, V_R=50V$	115		1.5		μs
$I_{GT}$	Gate trigger current	$V_A=12V, I_A=1A$	25	30		150	mA
$V_{GT}$	Gate trigger voltage			1.0		2.5	V
$I_H$	Holding current			20		100	mA
$V_{GD}$	Non-trigger gate voltage	$V_{DM}= 67\%V_{DRM}$	115	0.2			V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled				0.200	°C /W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled				0.04	°C /W
$V_{iso}$	Isolation voltage	50Hz,R.M.S,t=1min, $I_{iso}:1mA(MAX)$	2500				V
$F_m$	Thermal connection torque(M6)				6.0		N·m
	Mounting torque(M6)				6.0		N·m
$T_{stg}$	Stored temperature			-40		125	°C
$W_t$	Weight				860		g
Outline		413F3					

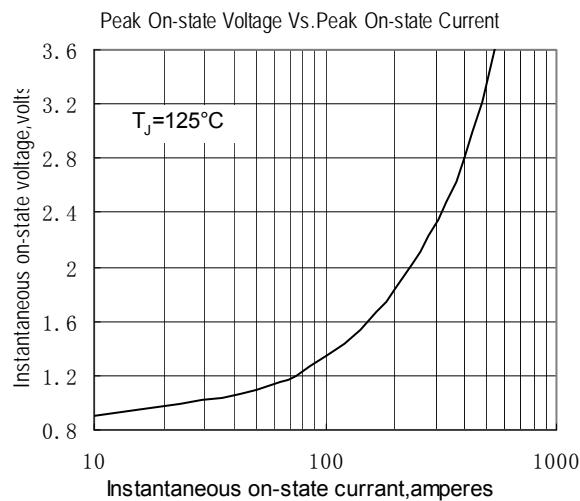


Fig.1

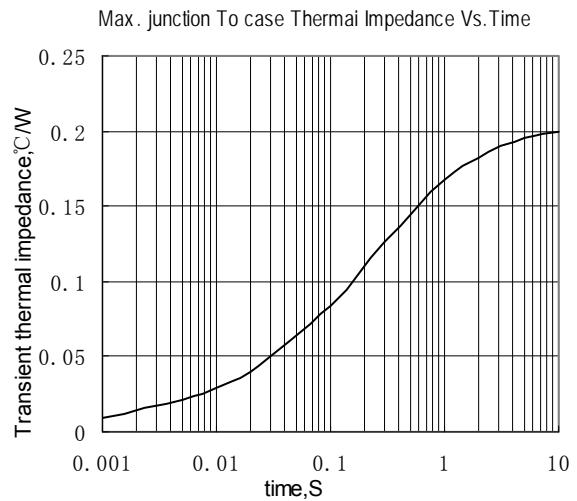


Fig.2

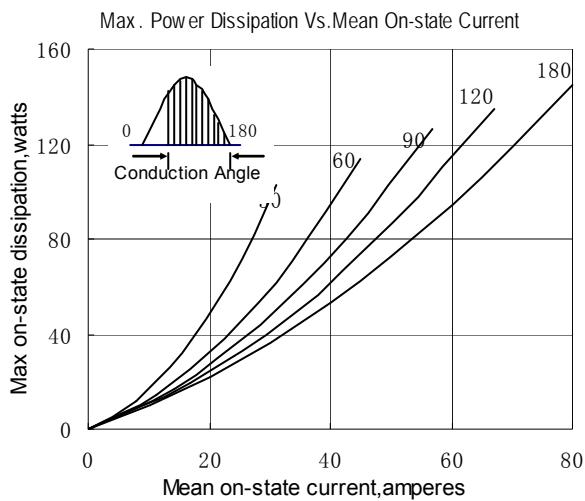


Fig.3

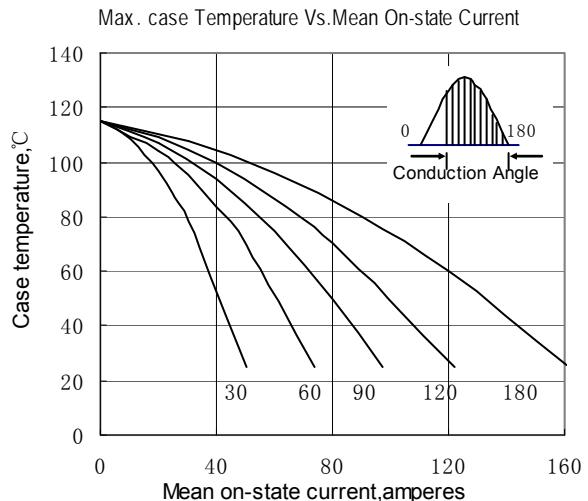


Fig.4

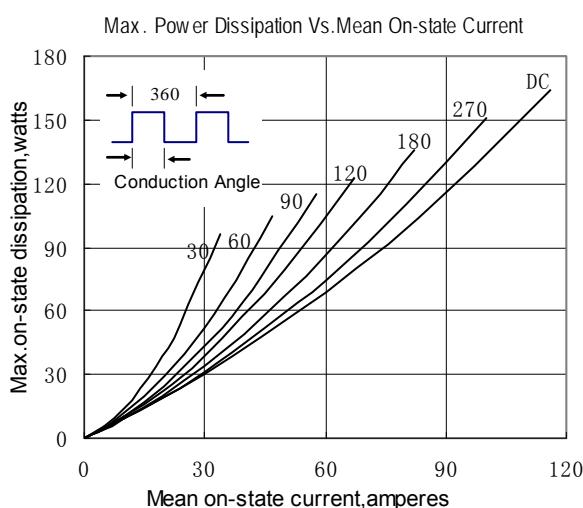


Fig.5

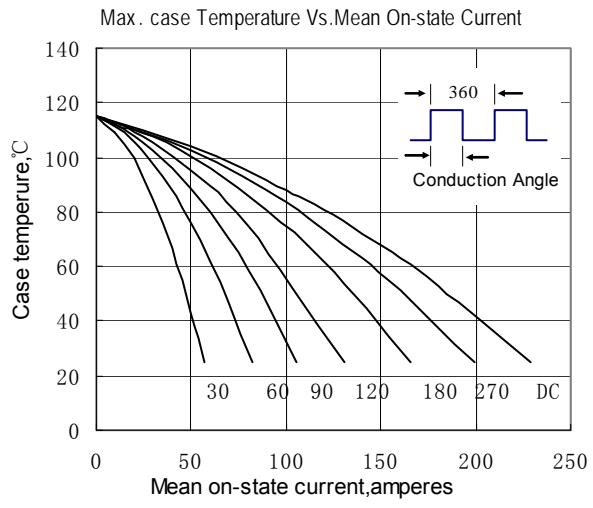


Fig.6

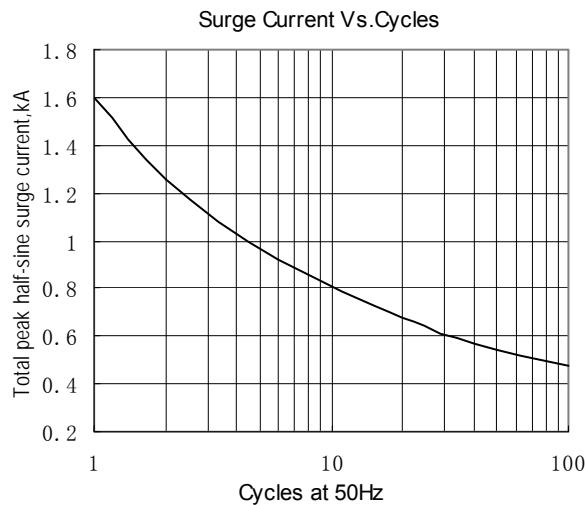


Fig.7

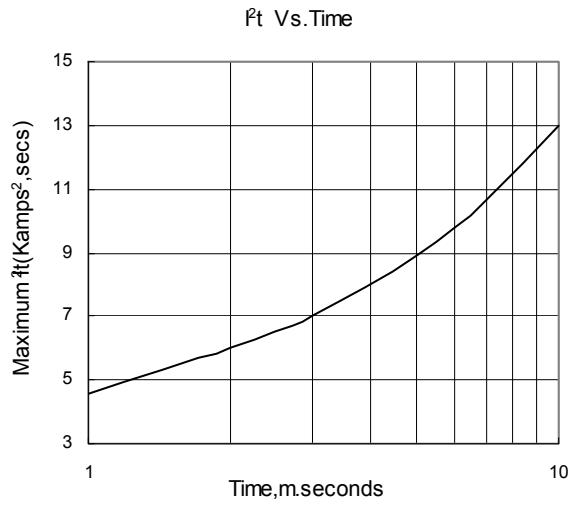


Fig.8

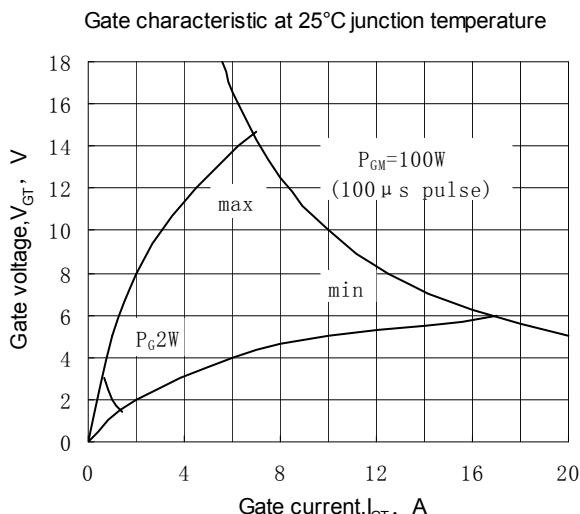


Fig.9

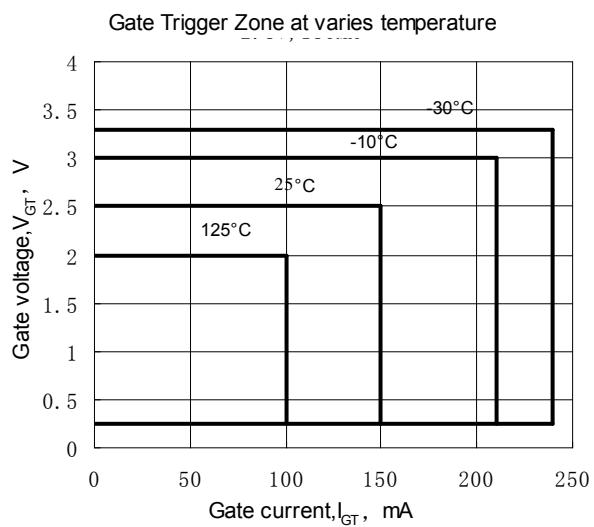
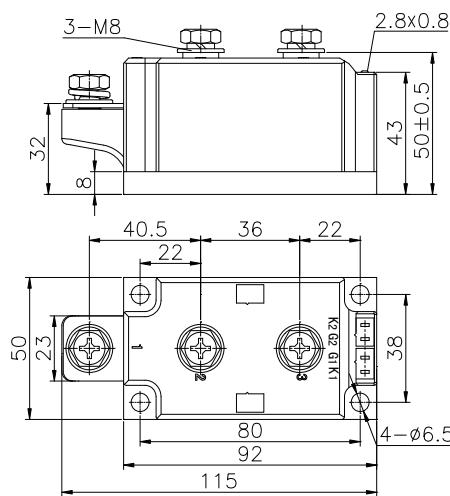


Fig.10

## Outline:



413F3

