

**Product Features**

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

**Typical Applications**

- AC/DC Motor drives
- Various rectifiers
- DC supply for PWM inverter



$I_{T(AV)}$	800	A
$V_{DRM} / V_{RRM}$	2000~2500	V
$I_{TSM}$	39	kA
$I^2t$	7605	$10^3A^2S$

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	Tj(°C)	Value			UNIT
				Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz Single side cooled, T <sub>c</sub> =85°C	125			800	A
$I_{T(RMS)}$	RMS on-state current		125			1556	A
$V_{DRM}$ $V_{RRM}$	Repetitive peak off-state voltage Repetitive peak reverse voltage	$V_{DRM} & V_{RRM} t_p = 10ms$ $V_{DSM} & V_{RSM} = V_{DRM} & V_{RRM} + 100V$	125	600		2500	V
$I_{DRM}$ $I_{RRM}$	Repetitive peak current	$V_{DM} = V_{DRM}$ $V_{RM} = V_{RRM}$	125			50	mA
$I_{TSM}$	Surge on-state current	10ms half sine wave	125			39.0	kA
$I^2t$	$I^2t$ for fusing coordination	$V_R = 0.6V_{RRM}$				7605	$10^3A^2S$
$V_{TO}$	Threshold voltage		125			0.85	V
$r_T$	On-state slop resistance					0.17	mΩ
$V_{TM}$	Peak on-state voltage	$I_{TM} = 2400A$	25			1.50	V
dv/dt	Critical rate of rise of off-state voltage	$V_{DM} = 67\%V_{DRM}$	125			1000	V/μs
di/dt	Critical rate of rise of on-state current	$I_{TM} = 1700A$ Gate source 1.5A $t_r \leq 0.5\mu s$ , Repetitive	125			200	A/μs
$I_{GT}$	Gate trigger current	$V_A = 12V, I_A = 1A$	25	40		200	mA
$V_{GT}$	Gate trigger voltage			0.8		3.0	V
$I_H$	Holding current			20		200	mA
$V_{GD}$	Non-trigger gate voltage	$V_{DM} = 67\%V_{DRM}$	125	0.2			V
$R_{th(j-c)}$	Thermal resistance (Junction to case)	Single side cooled				0.42	°C/W
$V_{iso}$	Isolation voltage	50Hz, R.M.S, t=1min, $I_{iso}: 1mA(MAX)$		2500			V
$F_m$	Thermal connection torque (M12)			12.0		14.0	N · m
	Mounting torque (M5)			4.5			
$T_{stg}$	Stored temperature			-40		6.0	N · m
$W_t$	Weight					125	°C
Outline						2600	g

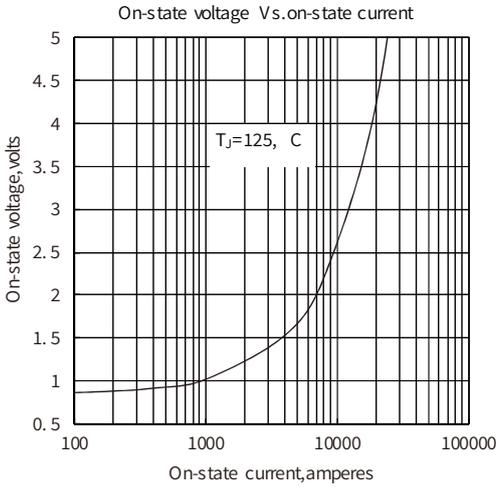


Fig.1

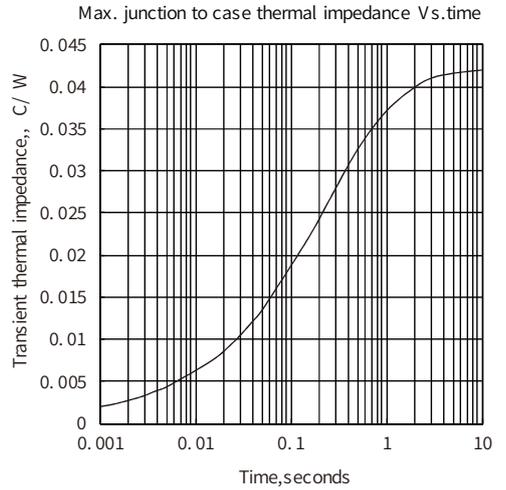


Fig.2

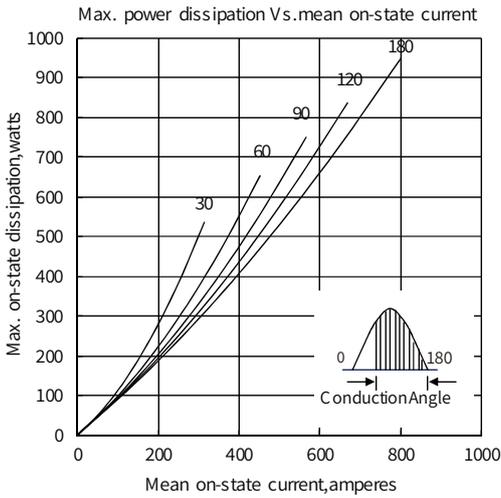


Fig.3

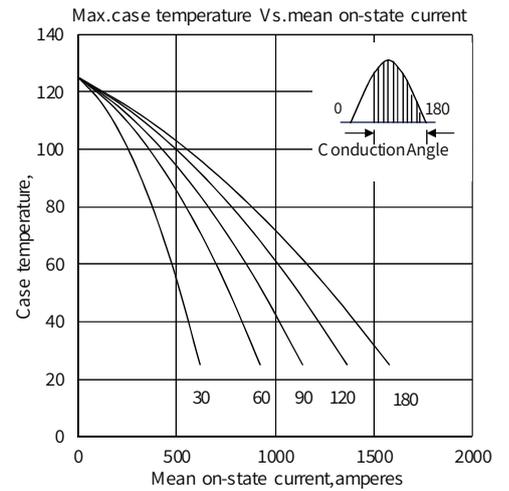


Fig.4

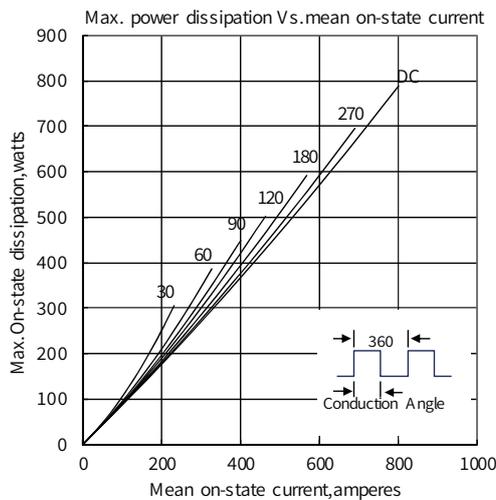


Fig.5

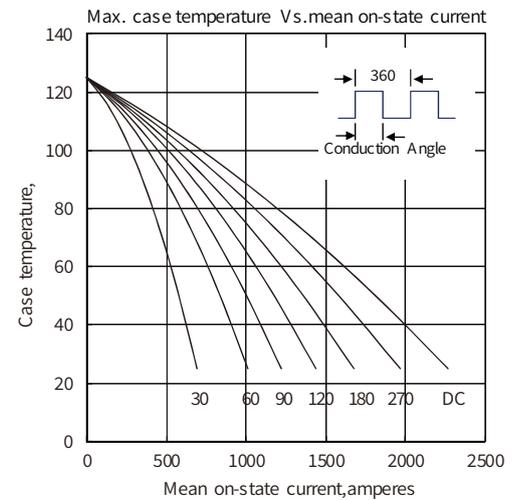


Fig.6

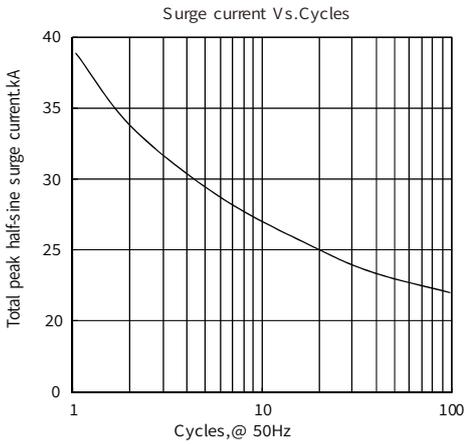


Fig.7

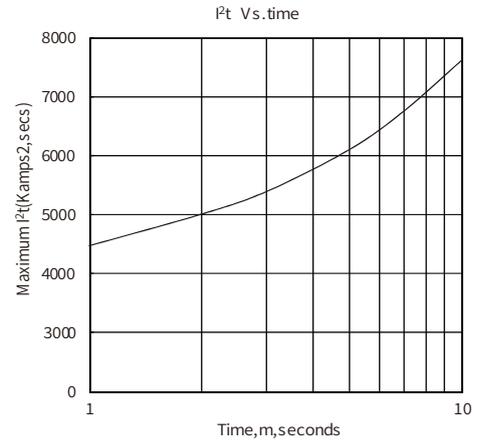


Fig.8

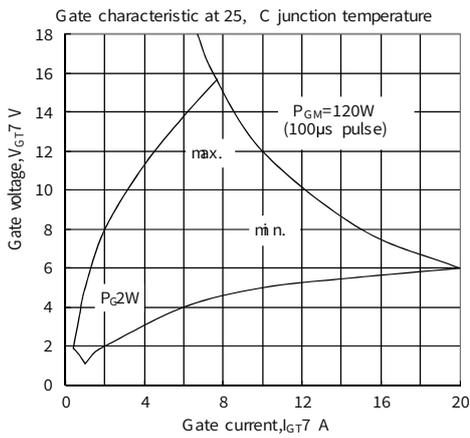


Fig.9

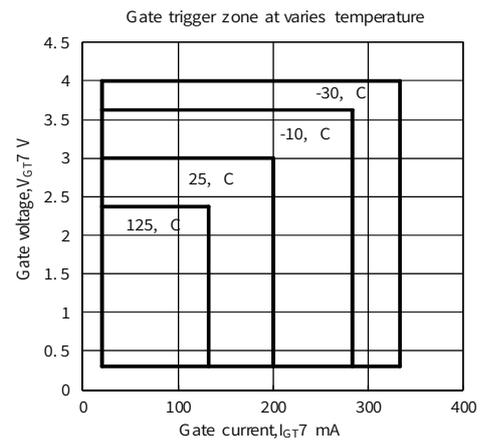


Fig.10

**Outline**

