



Features:

- n Isolated mounting base 3000V~
- n Solder joint technology with increased power cycling capability
- n Space and weight saving

Typical Applications:

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

V_{DRM}, V_{RRM}	Type & Outline
600V	MTC135-06-229H3/229H3B
800V	MTC135-08-229H3/229H3B
1000V	MTC135-10-229H3/229H3B
1200V	MTC135-12-229H3/229H3B
1400V	MTC135-14-229H3/229H3B
1600V	MTC135-16-229H3/229H3B
1800V	MTC135-18-229H3/229H3B

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 Single side cooled, $T_c=85^{\circ}C$	125			135	A
$I_{T(RMS)}$	RMS on-state current		125			212	A
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			35	mA
I_{TSM}	Surge on-state current	10ms half sine wave $V_R=60\%V_{RRM}$	125			3.5	kA
I^2t	I^2t for fusing coordination					61.3	$A^2s \cdot 10^3$
V_{TO}	Threshold voltage		125			0.95	V
r_r	On-state slope resistance					1.50	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=410A$	25			1.80	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	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	30		200	mA
V_{GT}	Gate trigger voltage			0.6		2.5	V
I_H	Holding current			10		250	mA
I_L	Latching current					1000	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 per chip				0.18	$^{\circ}C/W$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled per chip				0.08	$^{\circ}C/W$
V_{iso}	Isolation voltage	50Hz, R.M.S., $t=1min, I_{iso}: 1mA(MA X)$		3000			V
F_m	Terminal connection torque(M6)			4.5		6.0	N·m
	Mounting torque(M6)			4.5		6.0	N·m
T_{vj}	Junction temperature			-40		125	$^{\circ}C$
T_{stg}	Stored temperature			-40		125	$^{\circ}C$
W_t	Weight				165		g
Outline	229H3、229H3B						

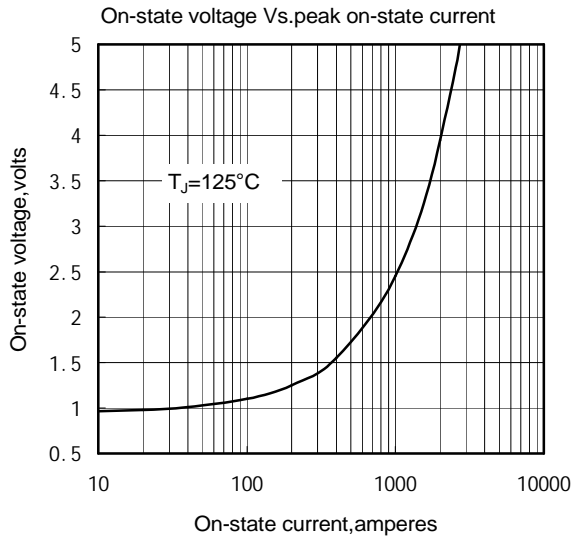


Fig1

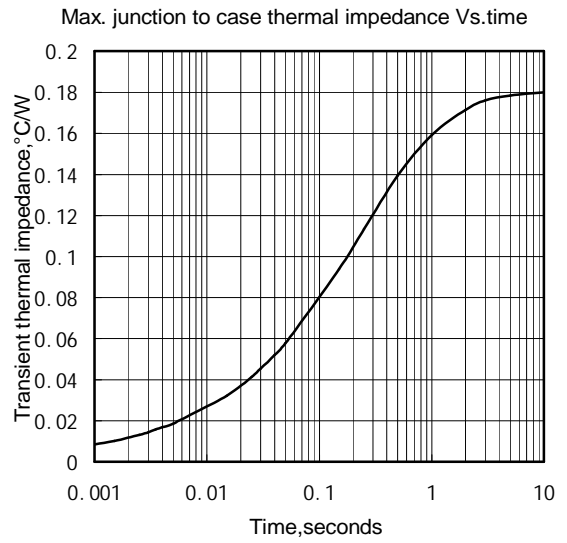


Fig2

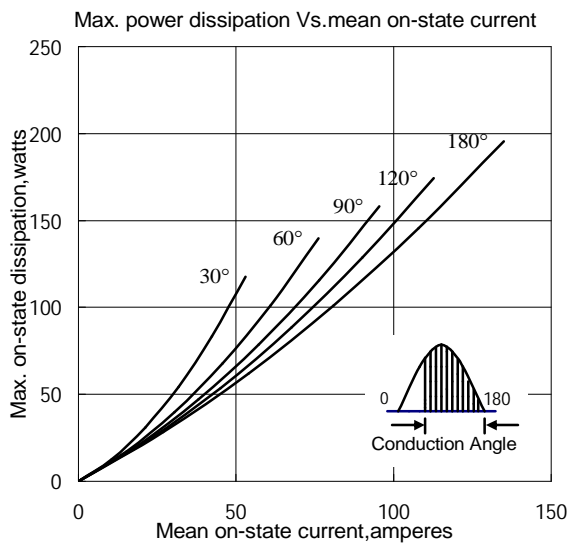


Fig3

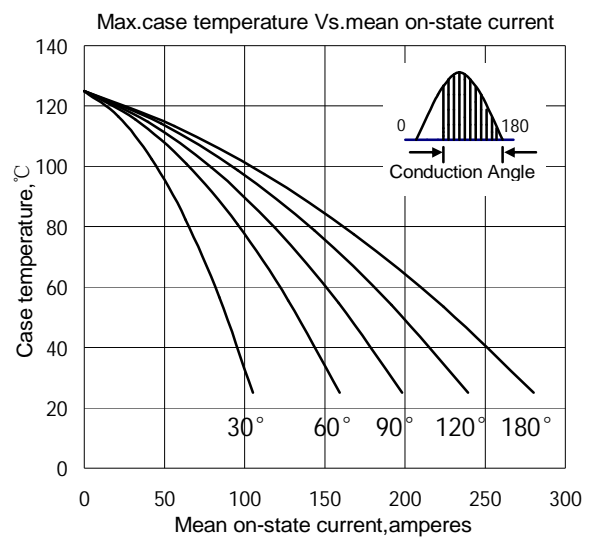


Fig4

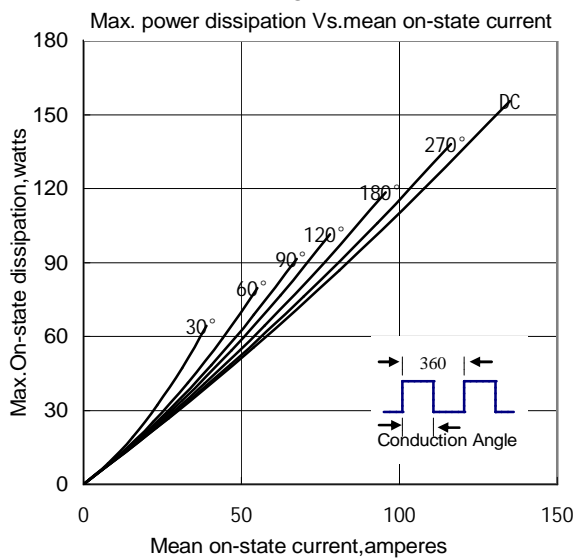


Fig5

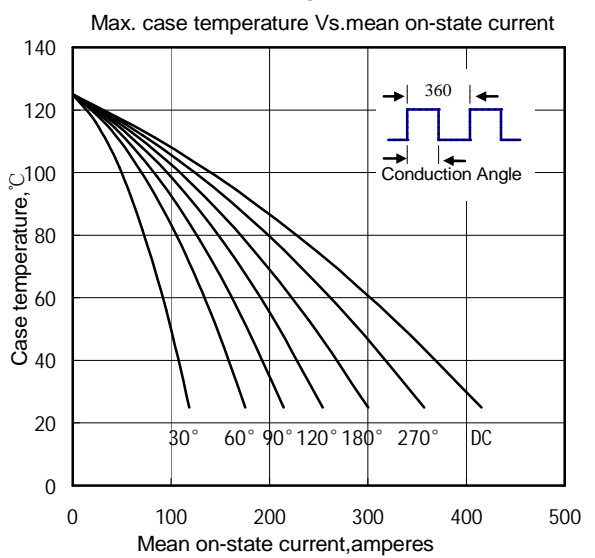


Fig6

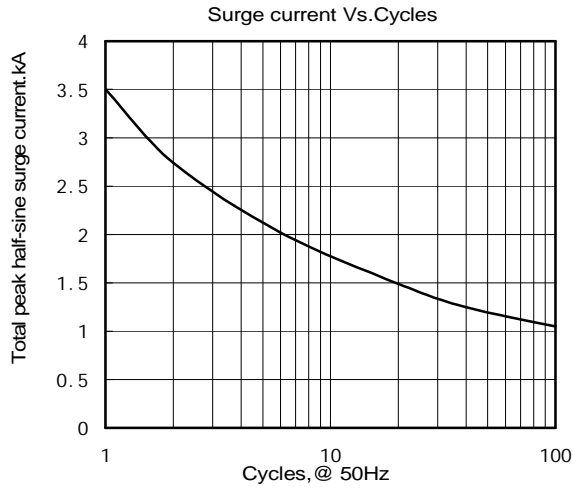


Fig 7

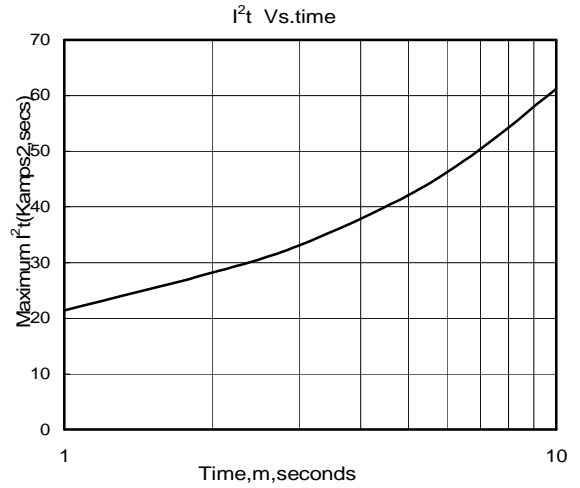


Fig 8

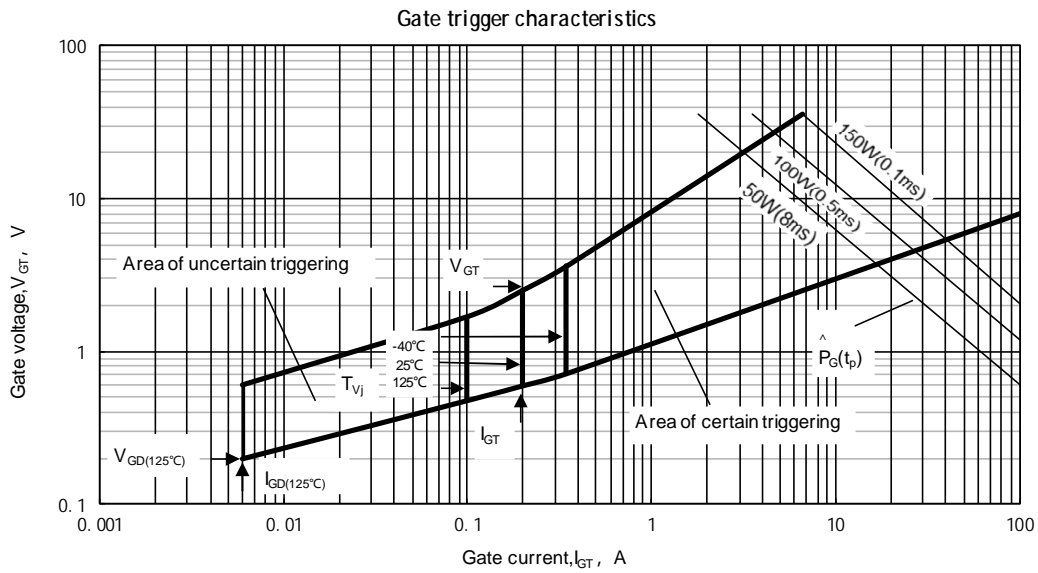
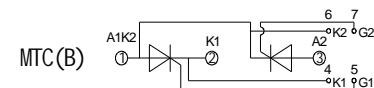
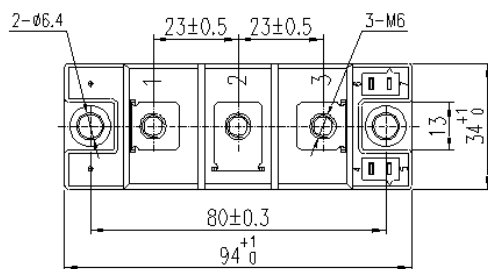
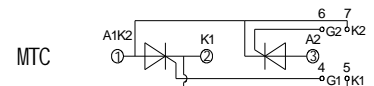
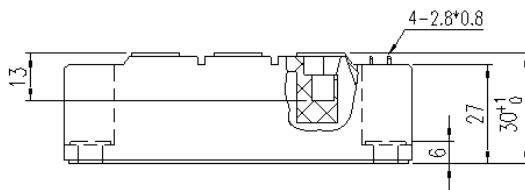


Fig.9

Outline:



Unmarked dimensional tolerance: ±0.5mm

TECHSEM reserves the right to change specifications without notice.