



Features:

- n Isolated mounting base 3000V~
- n Pressure contact 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
800V	DSKT570 / 08
1000V	DSKT570 / 10
1200V	DSKT570 / 12
1400V	DSKT570 / 14
1600V	DSKT570 / 16
1800V	DSKT570 / 18

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 Single side cooled, $T_c=85^{\circ}\text{C}$	125			570	A
$I_{T(RMS)}$	RMS on-state current					895	A
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			35	mA
I_{TSM}	Surge on-state current	$V_R=60\%V_{RRM}, t=10\text{ms}$ half sine,	125			15	kA
I^2t	I^2t for fusing coordination		125			1125	$10^3\text{A}^2\text{s}$
V_{TO}	Threshold voltage		125			0.80	V
r_T	On-state slope resistance					0.20	mΩ
V_{TM}	Peak on-state voltage	$I_{TM}=1710\text{A}$	25			1.45	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 $t_r \leq 0.5\mu\text{s}$ Repetitive	125			200	A/μs
I_{GT}	Gate trigger current	$V_A=12\text{V}, I_A=1\text{A}$	25	30		200	mA
V_{GT}	Gate trigger voltage			1.0		3.0	V
I_H	Holding current			10		200	mA
I_L	Latching current					1500	mA
V_{GD}	Non-trigger gate voltage	$V_{DM}=67\%V_{DRM}$	125			0.20	V
$R_{th(j-c)}$	Thermal resistance Junction to case	Single side cooled per chip				0.065	$^{\circ}\text{C/W}$
$R_{th(c-h)}$	Thermal resistance case to heatsink	Single side cooled per chip				0.024	$^{\circ}\text{C/W}$
V_{iso}	Isolation voltage	50Hz, R.M.S, $t=1\text{min}, I_{iso}: 1\text{mA}(\text{MAX})$		3000			V
F_m	Terminal connection torque(M10)			10.0		12.0	N·m
	Mounting torque(M6)			4.5		6.0	N·m
T_{vj}	Junction temperature			-40		125	$^{\circ}\text{C}$
T_{stg}	Stored temperature			-40		125	$^{\circ}\text{C}$
W_t	Weight				1540		g

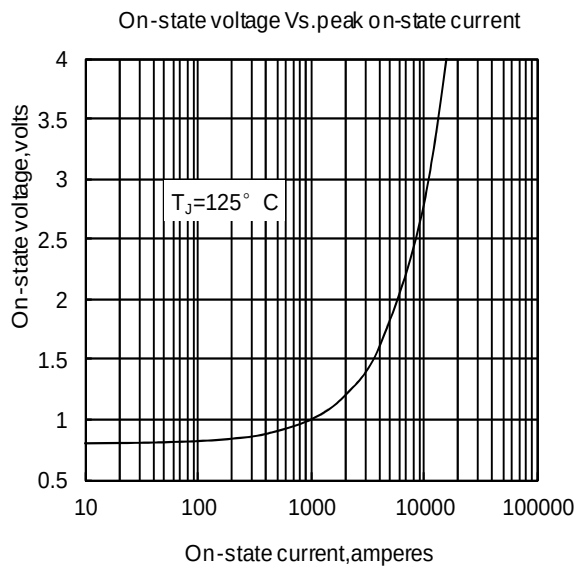


Fig1

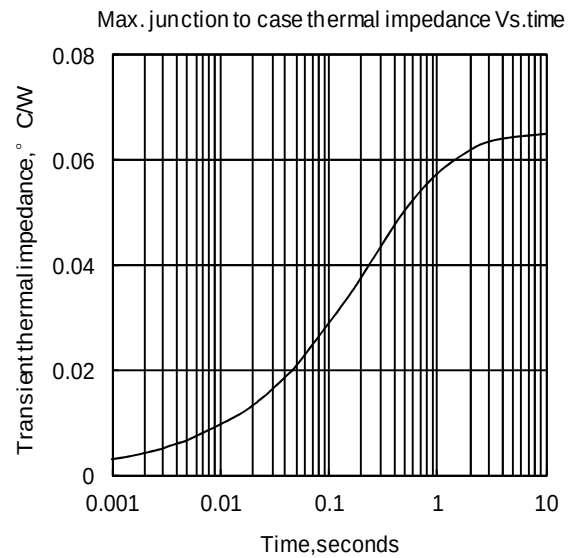


Fig2

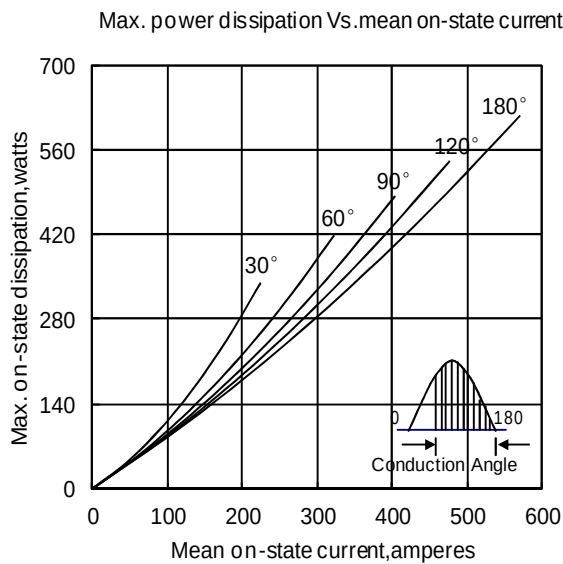


Fig3

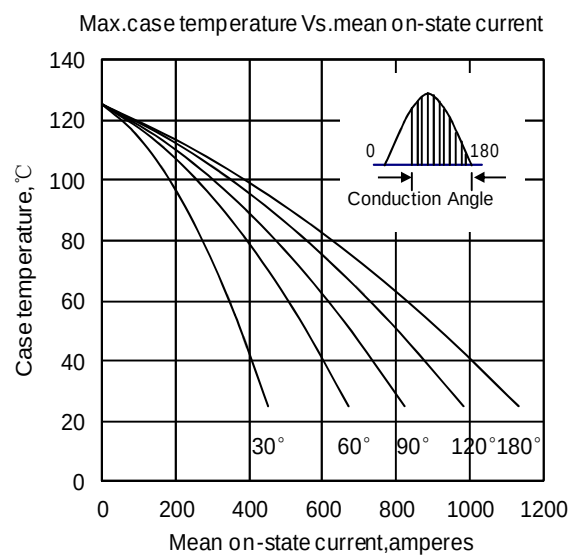


Fig4

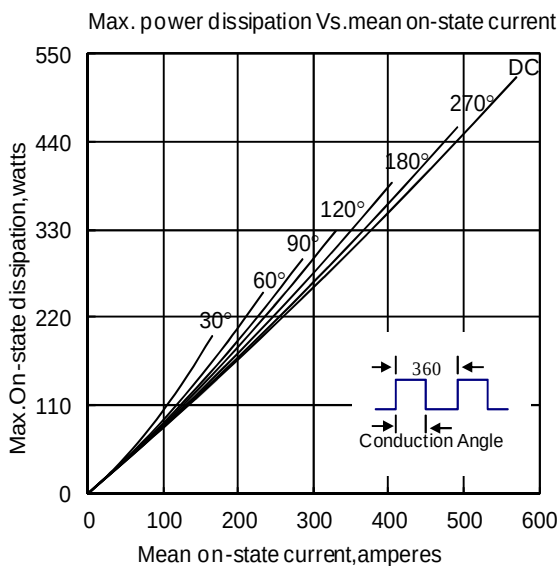


Fig5

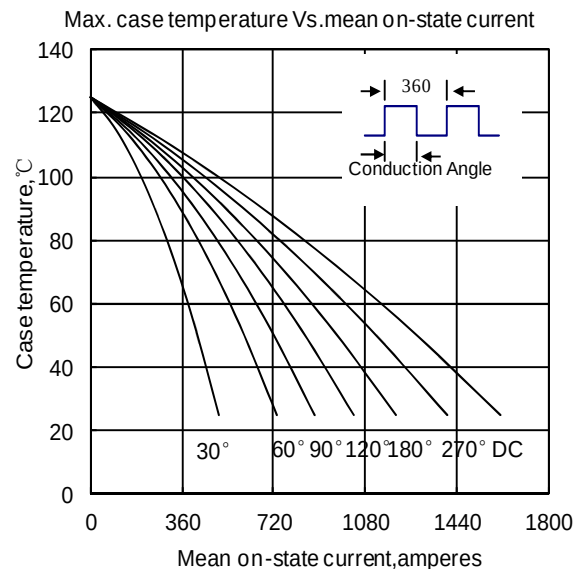


Fig6

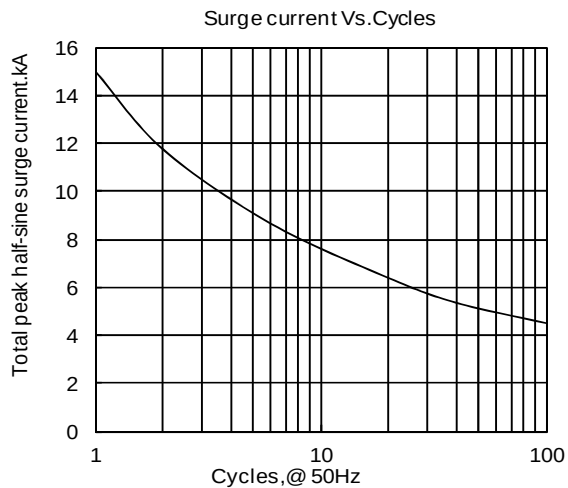


Fig7

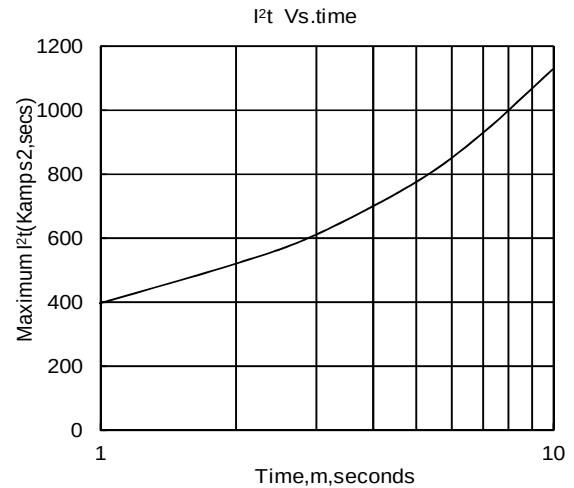


Fig8

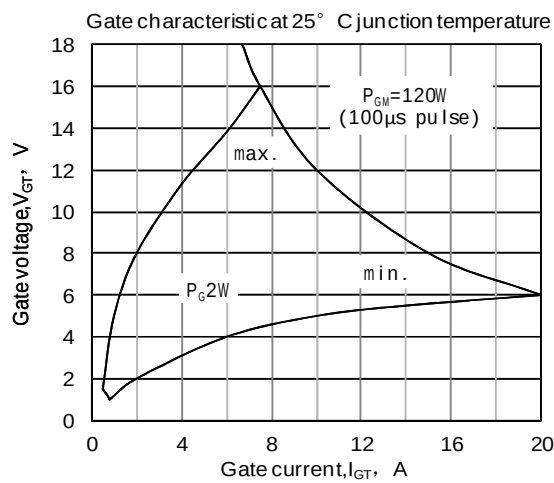


Fig9

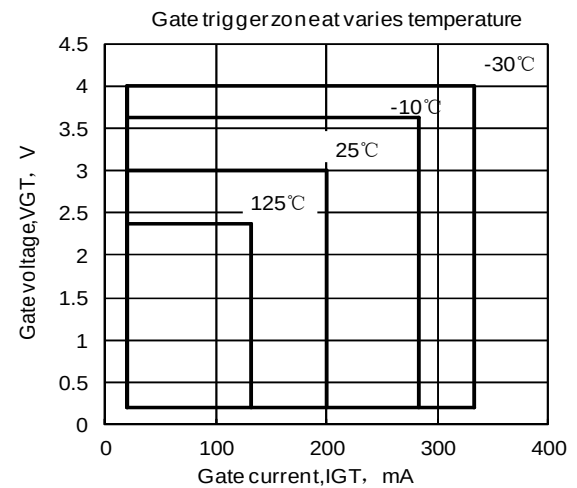
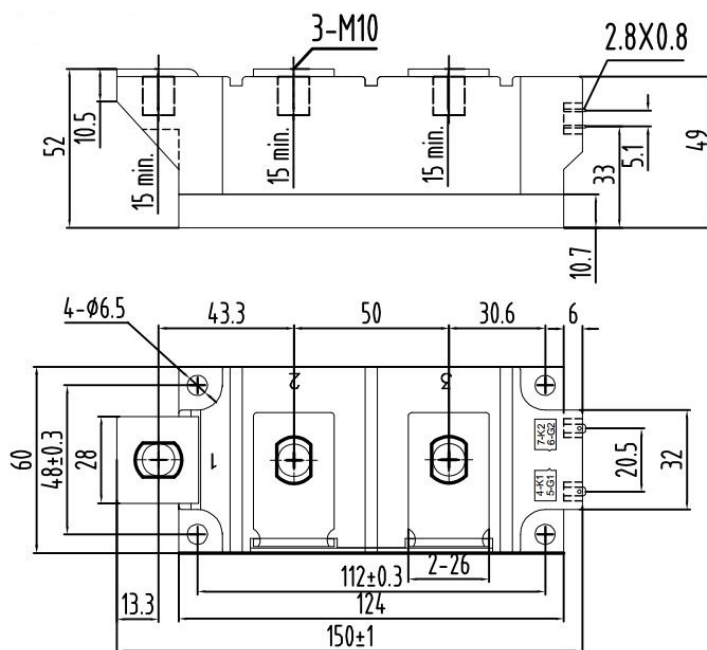


Fig10

Outline:



Unmarked dimensional tolerance: $\pm 0.5\text{mm}$

