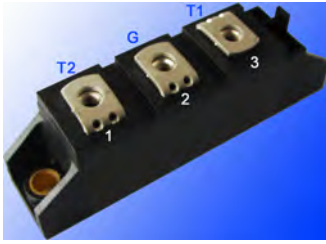
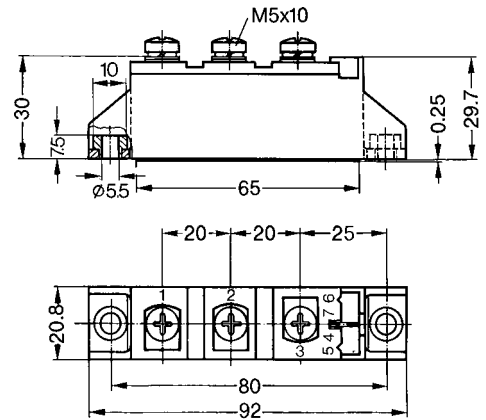
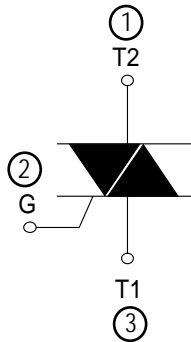


SBTA72G04 thru SBTA72G12

Trjrac Modules (Isolated)



Unit:mm



	V _{DRM} V	V _{DSM} V
SBTA72G04	400	450
SBTA72G06	600	650
SBTA72G10	1000	1100
SBTA72G12	1200	1300

Symbol	Test Conditions	Maximum Ratings	Unit
I_{RMS}	T _{VJ} =58 °C	70	A
I_{TSM}	T _{VJ} =45°C V _R =0 t=10ms (50Hz), sine t=8.3ms (60Hz), sine	1080 1200	A
	T _{VJ} =T _{VJM} V _R =0 t=10ms(50Hz), sine t=8.3ms(60Hz), sine	750 800	
i²t	T _{VJ} =45°C V _R =0 t=10ms (50Hz), sine t=8.3ms (60Hz), sine	6000 5500	A ² s
	T _{VJ} =T _{VJM} V _R =0 t=10ms(50Hz), sine t=8.3ms(60Hz), sine	4350 4000	
(di/dt)_{cr}	T _{VJ} =T _{VJM} f=50Hz, t _p =200us V _D =2/3V _{DRM} I _G =0.3A dig/dt=0.3A/us	repetitive, I _T =40A 50 non repetitive, I _T =I _{TAVM} 300	A/us
	T _{VJ} =T _{VJM} ; R _{GK} =∞; method 1 (linear voltage rise)	V _D =2/3V _{DRM} 500	V/us
P_{GM}	T _{VJ} =T _{VJM} I _T =I _{TAVM} t _p =30us t _p =300us	10 5	W
P_{GAV}		1	W
V_{RGM}		10	V
T_{VJ} T_{VJM} T_{stg}		-40...+125 125 -40...+125	°C
V_{ISOL}	50/60Hz, RMS t=1minute, leads-to-tab	2500	V~
M_d	Mounting torque (M5)	2.5-4/22-35	Nm/lb.in.
	Terminal connection torque (M5)	2.5-4/22-35	
Weight		75	g

Sirectifier®

SBTA72G04 thru SBTA72G12

Tr]ac Modules (Isolated)

Symbol	Test Conditions	Characteristic Values	Unit
I_R, I_D	$T_{VJ}=T_{VJM}; V_D=V_{DRM}$	10	mA
V_{TM}	$I_T=100A; T_{VJ}=25^{\circ}C$	1.55	V
V_{TO}	For power-loss calculations only ($T_{VJ}=125^{\circ}C$)	0.85	V
r_T		11	mΩ
V_{GT}	I II III IV $V_D=6V; I_T=1A; T_{VJ}=25^{\circ}C$	1.3	V
		1.3	
		1.3	
		1.5	
I_{GT}	I II III IV $V_D=6V; I_T=1A; T_{VJ}=25^{\circ}C$	50	mA
		50	
		50	
		100	
V_{GD}	$T_{VJ}=T_{VJM}; V_D=2/3V_{DRM}$	0.2	V
I_{GD}		10	mA
I_H	$T_{VJ}=25^{\circ}C; V_D=6V; R_{GK}=\infty$	100	mA
R_{thJC}	DC current	1.0	K/W
R_{thJ_}	DC current	1.2	K/W
a	Max. acceleration, 50 Hz	50	m/s ²

Sirectifier[®]

SBTA72G04 thru SBTA72G12

Tr_{jac} Modules (Isolated)

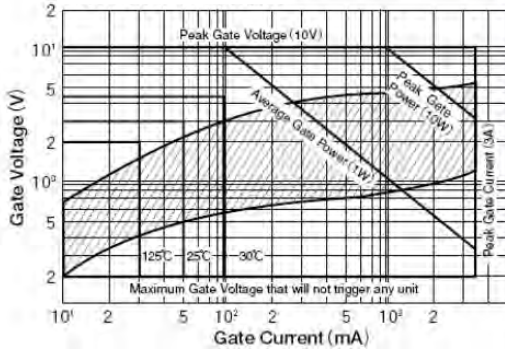


Fig. 1 Gate Characteristics

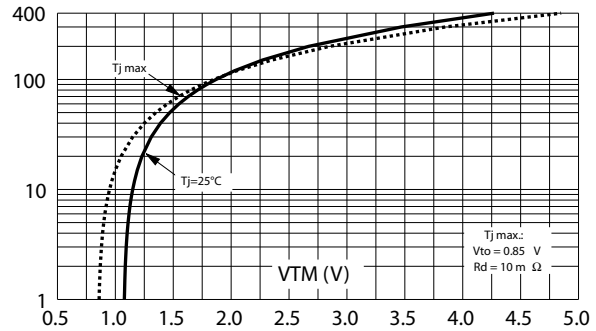


Fig. 2 On-state characteristics

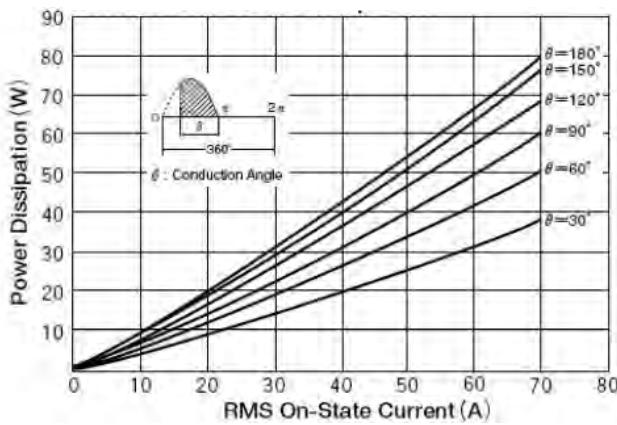


Fig. 3 On-state Current vs. Maximum Power Dissipation

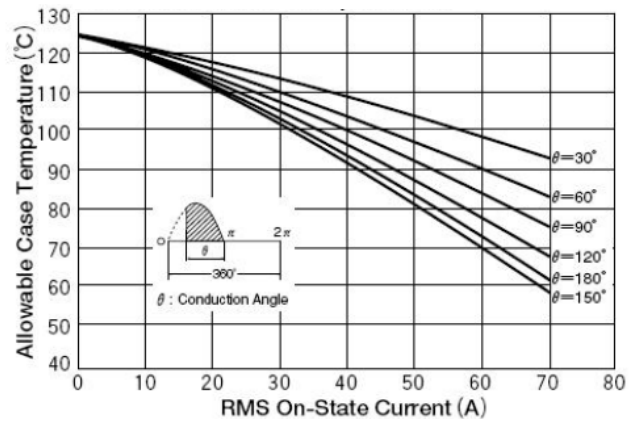


Fig. 4 On-state Current vs. Allowable Case Temperature

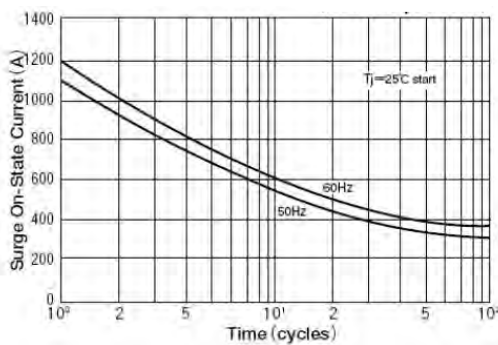


Fig. 5 Surge On-state Current Rating (Non-Repetitive)

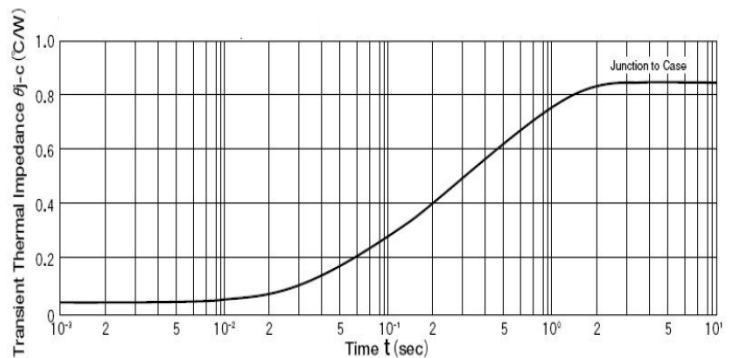


Fig. 6 Transient Thermal Impedance

