

THYRISTOR
SILICON DIFFUSED TYPE

SF5(B, D, G)14

MEDIUM POWER CONTROL APPLICATIONS.

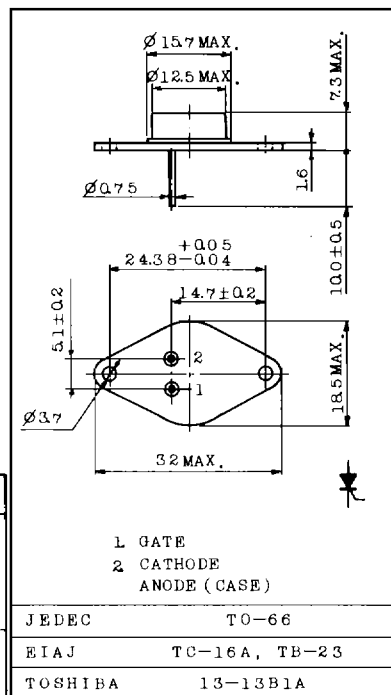
Unit in mm

FEATURES:

- Repetitive Peak Off-State Voltage : V_{DRM}) = 100 ~ 400V
Repetitive Peak Reverse Voltage : V_{RRM}
- Average On-State Current : $I_T(AV)$ = 5A
- JEDEC TO-66 Package.

MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Off-State Voltage and Repetitive Peak Reverse Voltage	SF5B14	100	V
	SF5D14	200	
	SF5G14	400	
Non-Repetitive Peak Reverse Voltage (Non-Repetitive < 5ms, $T_j=0 \sim 125^\circ\text{C}$)	SF5B14	150	V
	SF5D14	300	
	SF5G14	500	
Average On-State Current (Half Sine Waveform $T_c=75^\circ\text{C}$)	$I_T(AV)$	5	A
R.M.S On-State Current	$I_T(RMS)$	7.8	A
Peak One Cycle Surge On-State Current (Non-Repetitive)	I_{TSM}	90(50Hz)	A
		99(60Hz)	
I^2t Limit Value ($t=1 \sim 10\text{ms}$)	I^2t	40	A ² s
Peak Gate Power Dissipation	P_{GM}	5	W
Average Gate Power Dissipation	$P_{G(AV)}$	0.5	W
Peak Forward Gate Voltage	V_{FGM}	12	V
Peak Reverse Gate Voltage	V_{RGM}	-5	V
Peak Forward Gate Current	I_{GM}	3	A
Junction Temperature	T_j	-40 ~ 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40 ~ 125	$^\circ\text{C}$



Mounting Kit No. AC20C

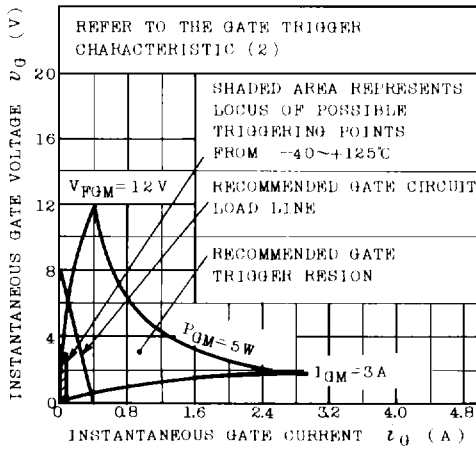
Weight : 6g

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ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Repetitive Peak Off-State Current and Repetitive Peak Reverse Current	I_{DRM} I_{RRM}	$V_{DRM}=V_{RRM}=\text{Rated}$, $T_j=125^\circ\text{C}$	-	-	750	μA
Peak On-State Voltage	V_{TM}	$I_{TM}=15\text{A}$	-	-	1.5	V
Gate Trigger Voltage	V_{GT}	$V_D=6\text{V}$, $R_L=100\Omega$	-	-	1.5	V
Gate Trigger Current	I_{GT}		-	-	27	mA
Gate Non-Trigger Voltage	V_{GD}	$V_D=6\text{V}$, $R_L=100\Omega$, $T_j=125^\circ\text{C}$	0.2	-	-	V
Holding Current	I_H	$R_L=100\Omega$	-	-	30	mA
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	-	-	4	$^\circ\text{C/W}$

GATE TRIGGER CHARACTERISTIC (1)



GATE TRIGGER CHARACTERISTIC (2)

