

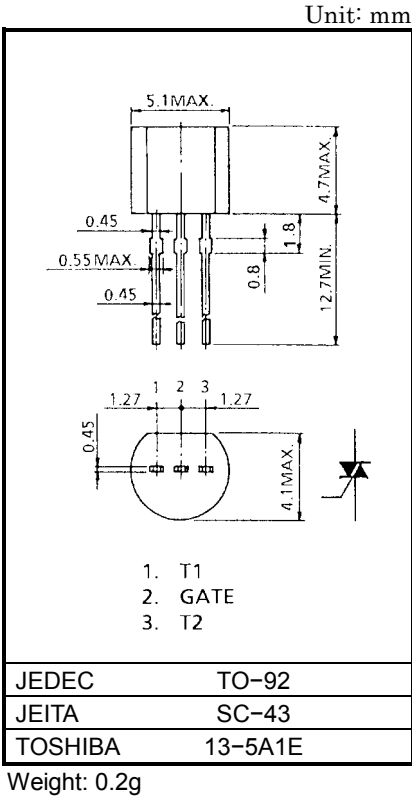
SM08G43

AC POWER CONTROL APPLICATIONS

- Repetitive Peak Off-State Voltage    :  $V_{DRM} = 400V$
- R.M.S On-State Current                :  $I_T (RMS) = 0.8A$

MAXIMUM RATINGS

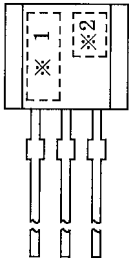
CHARACTERISTIC	SYMBOL	RATING	UNIT
Repetitive Peak Off-State Voltage	$V_{DRM}$	400	V
R.M.S On-State Current (Full Sine Waveform $T_c = 65^{\circ}C$ )	$I_T (RMS)$	0.8	A
Peak One Cycle Surge On-State Current (Non-Repetitive)	$I_{TSM}$	6 (50Hz)	A
		6.6 (60Hz)	
$I^2t$ Limit Value	$I^2t$	0.18	$A^2s$
Peak Gate Power Dissipation	$P_{GM}$	0.5	W
Average Gate Power Dissipation	$P_G (AV)$	0.05	W
Peak Gate Voltage	$V_{GM}$	5	V
Peak Gate Current	$I_{GM}$	0.3	A
Junction Temperature	$T_j$	-40~125	$^{\circ}C$
Storage Temperature Range	$T_{stg}$	-40~125	$^{\circ}C$



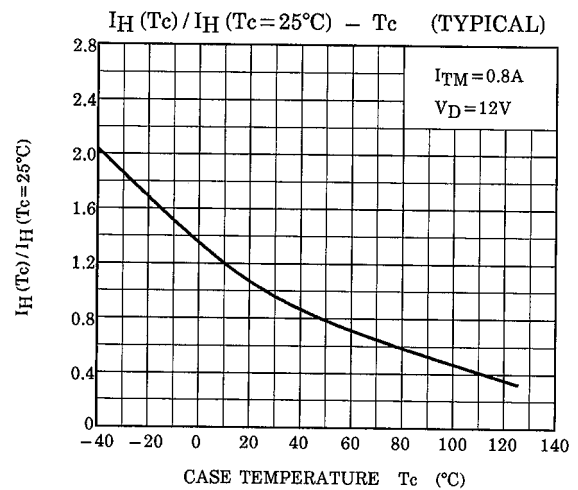
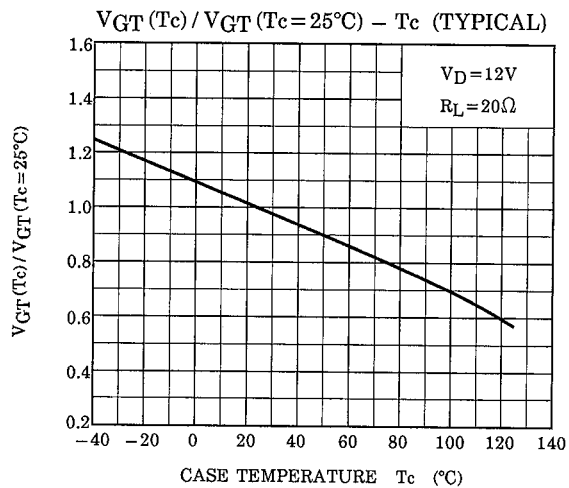
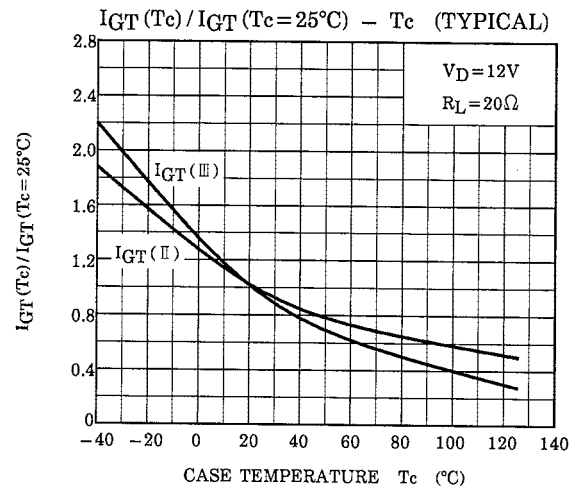
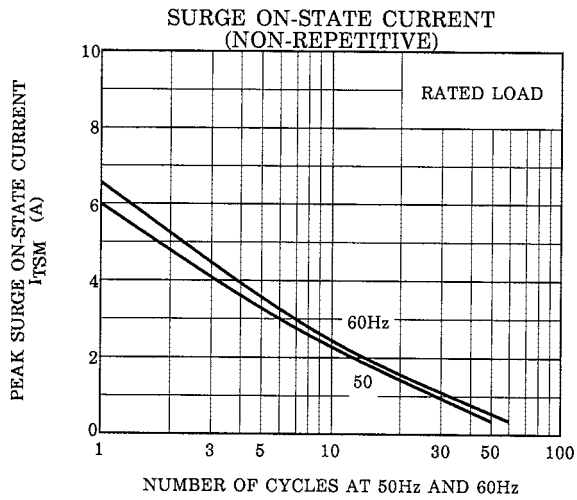
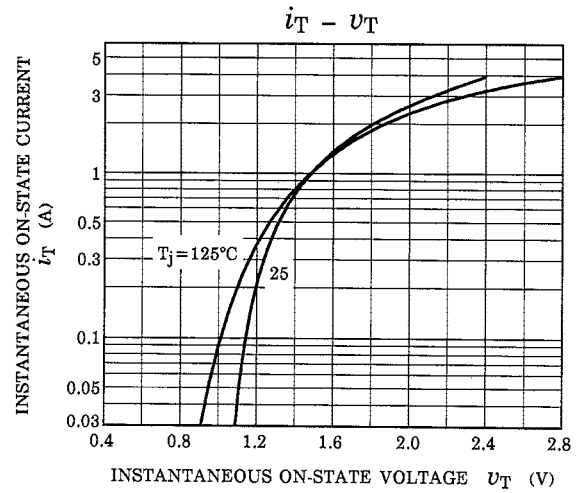
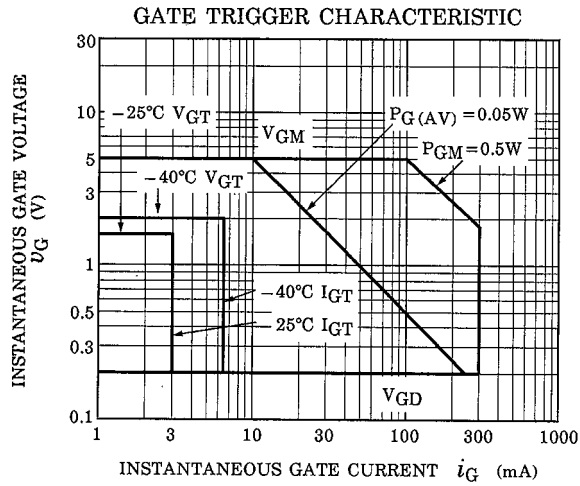
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

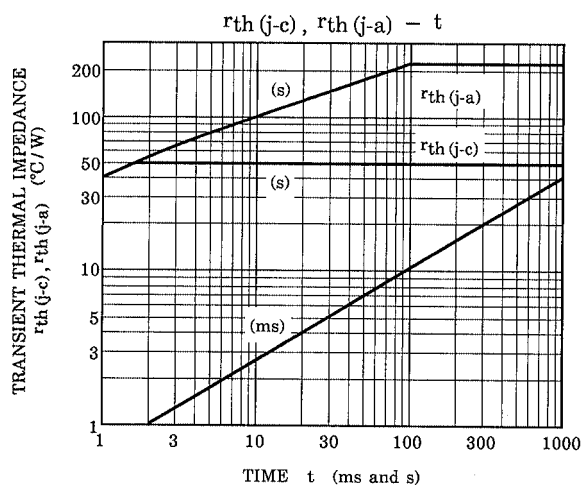
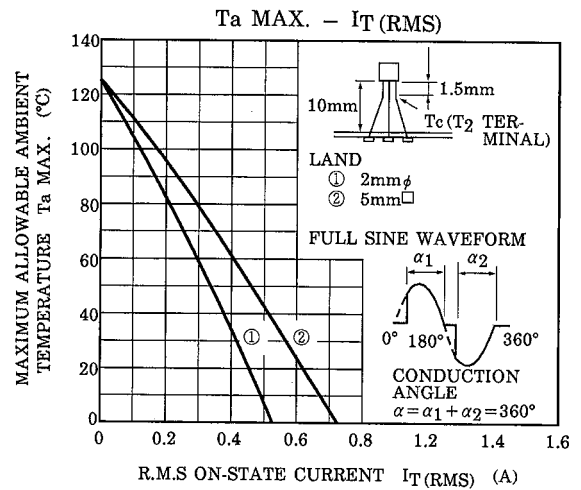
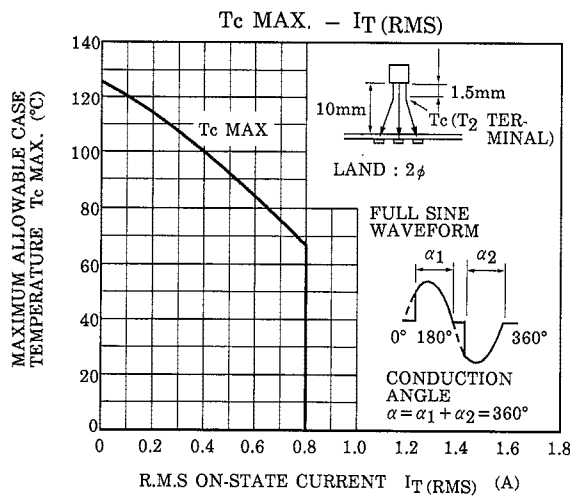
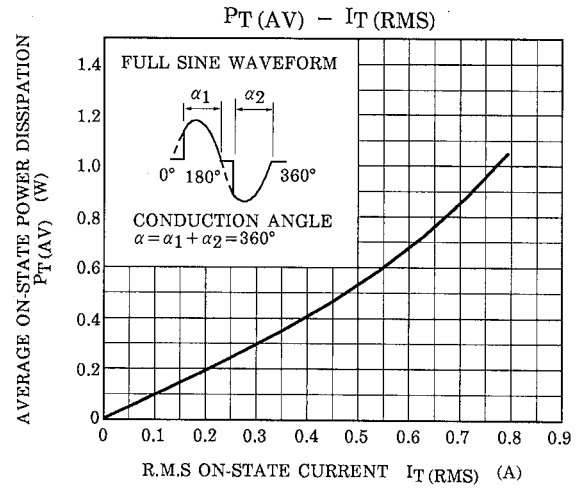
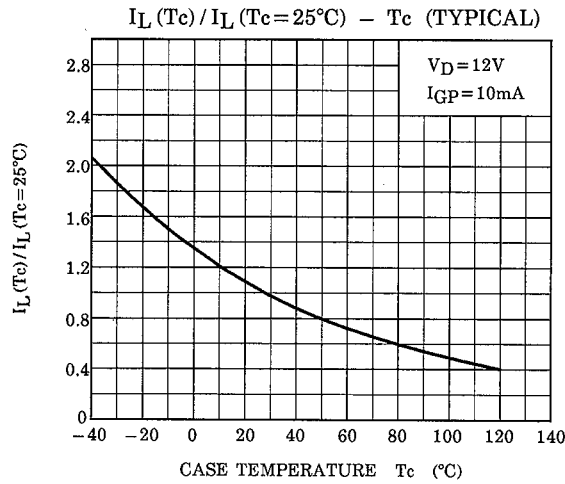
CHARACTERISTIC			SYMBOL	TEST CONDITION		MIN	TYP.	MAX	UNIT
Repetitive Peak Off-State Current			I <sub>DRM</sub>	V <sub>DRM</sub> = Rated		—	—	10	μA
Gate Trigger Voltage	I	(1+)	V <sub>GT</sub>	V <sub>D</sub> = 12V, R <sub>L</sub> = 20Ω	T2 (+) , Gate (+)	—	—	—	V
	II	(1-)			T2 (+) , Gate (-)	—	—	1.5	
	III	(3-)			T2 (-) , Gate (-)	—	—	1.5	
	IV	(3+)			T2 (-) , Gate (+)	—	—	—	
Gate Trigger Current	I	(1+)	I <sub>GT</sub>		T2 (+) , Gate (+)	—	—	—	mA
	II	(1-)			T2 (+) , Gate (-)	—	—	3	
	III	(3-)			T2 (-) , Gate (-)	—	—	3	
	IV	(3+)			T2 (-) , Gate (+)	—	—	—	
Peak On-State Voltage			V <sub>TM</sub>	I <sub>TM</sub> = 1.2A		—	—	1.5	V
Gate Non-Trigger Voltage			V <sub>GD</sub>	V <sub>D</sub> = Rated, T <sub>c</sub> = 125°C		0.2	—	—	V
Holding Current			I <sub>H</sub>	V <sub>D</sub> = 12V, Gate Open		—	—	10	mA
Thermal Resistance			R <sub>th (j-c)</sub>	Junction to Case		—	—	50	°C / W
Thermal Resistance			R <sub>th (j-a)</sub>	Junction to Ambient		—	—	220	°C / W

MARKING



NUMBER	SYMBOL		MARK
*1	TYPE	SM08G43	M08G
*2	<div>Lot Number □ □     Month (Starting from             Alphabet A )     Year (Last Decimal Digit of           the Current Year )</div>		Example 8A: January 1998 8B: February 1998 8L: December 1998





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