

SM08G43

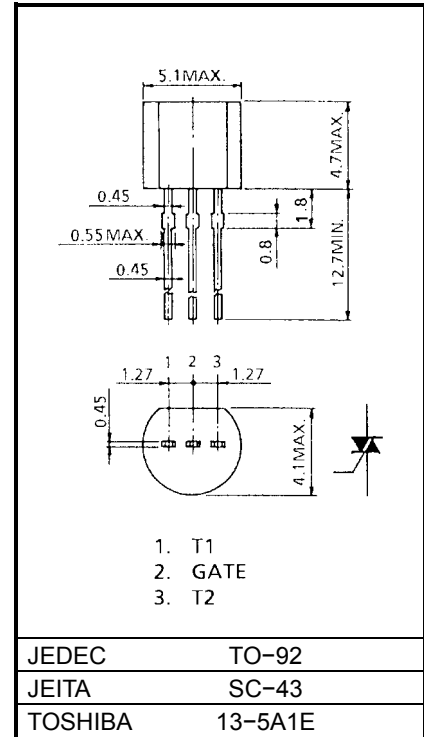
AC POWER CONTROL APPLICATIONS

- 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	$^\circ C$

Unit: mm

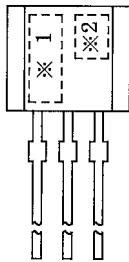


Weight: 0.2g

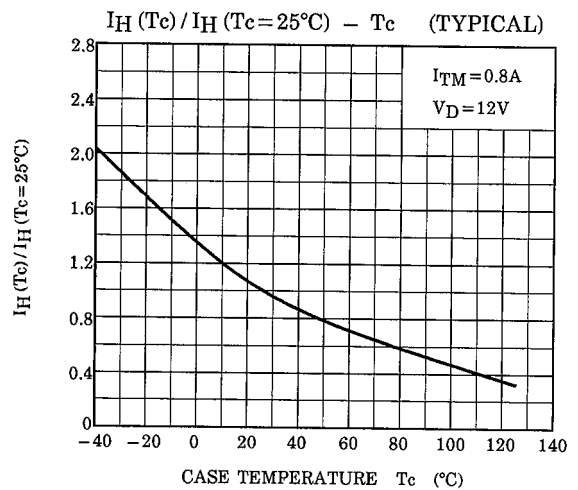
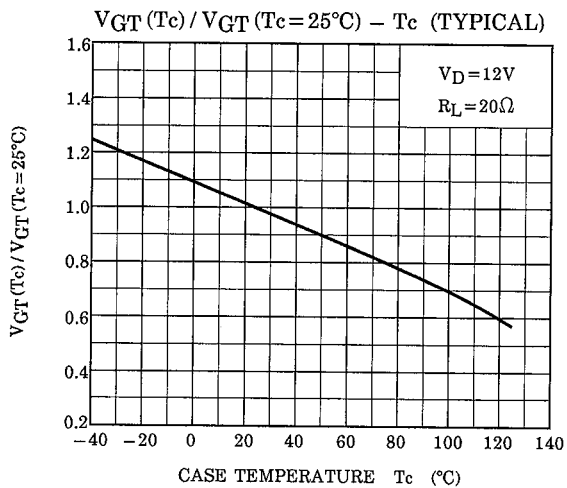
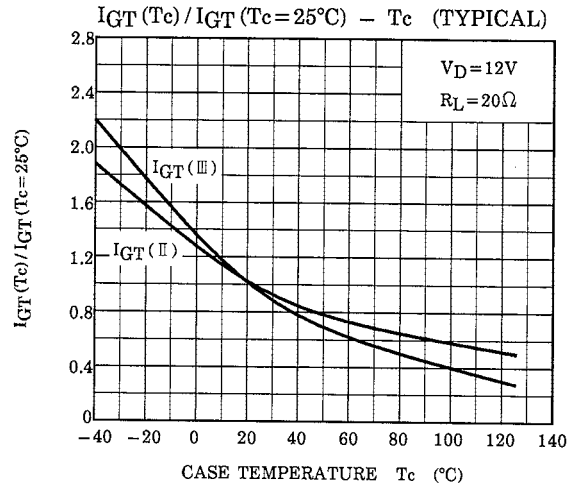
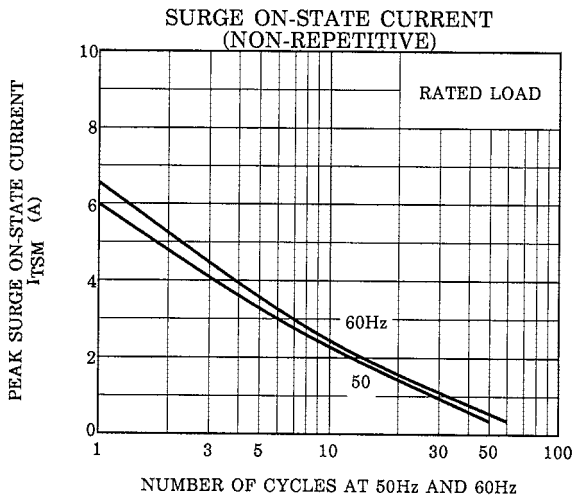
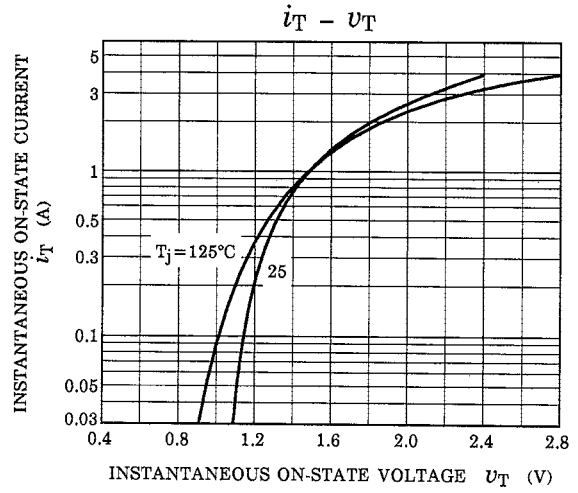
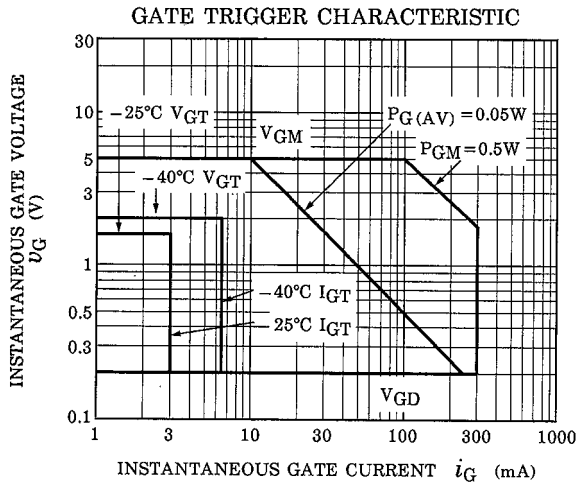
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

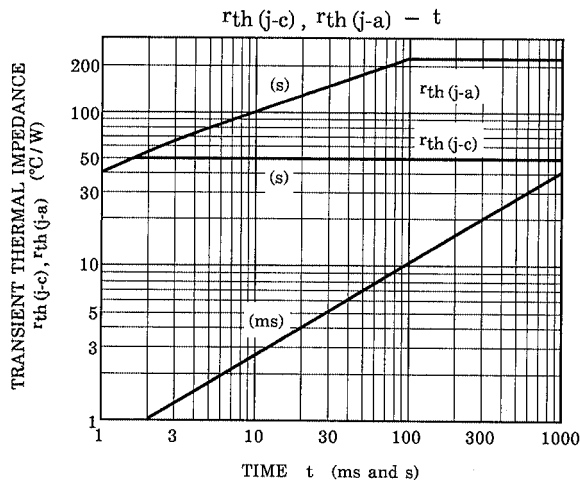
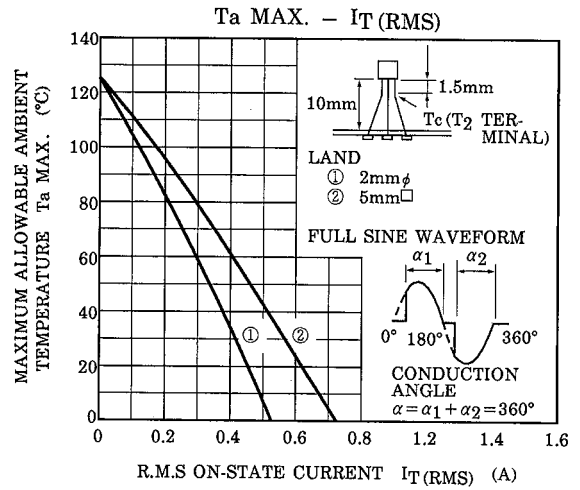
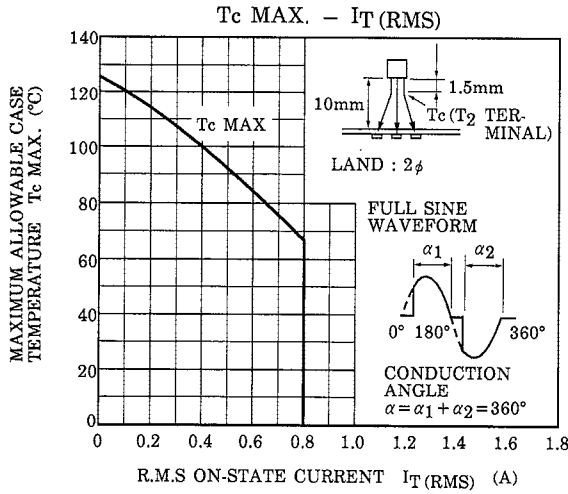
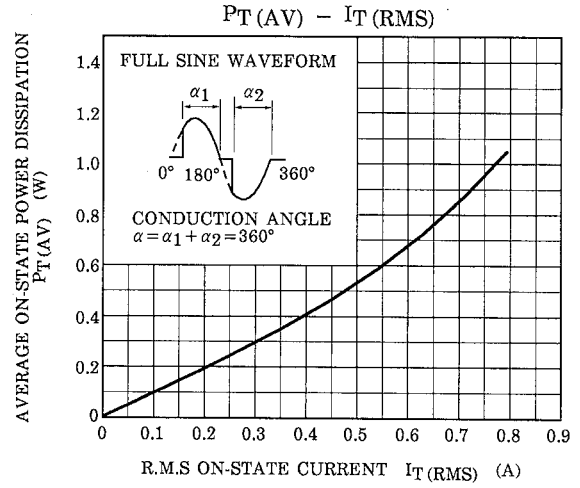
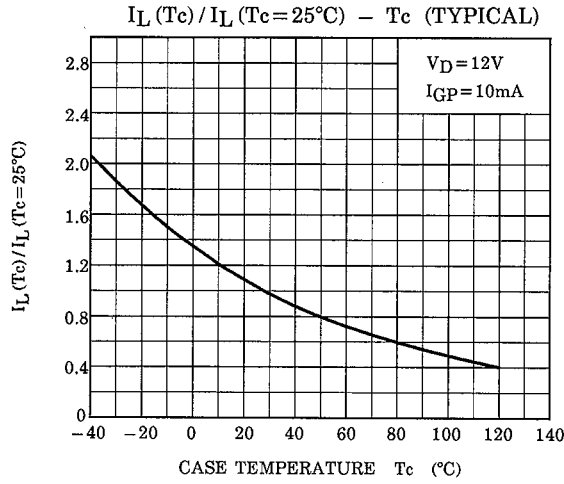
CHARACTERISTIC			SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT	
Repetitive Peak Off-State Current			I_{DRM}	$V_{DRM} = \text{Rated}$	—	—	10	μA	
Gate Trigger Voltage	I	(1+)	V_{GT}	$V_D = 12\text{V}, R_L = 20\Omega$	T2 (+), Gate (+)	—	—	V	
	II	(1-)			T2 (+), Gate (-)	—	—		1.5
	III	(3-)			T2 (-), Gate (-)	—	—		1.5
	IV	(3+)			T2 (-), Gate (+)	—	—		—
Gate Trigger Current	I	(1+)	I_{GT}		T2 (+), Gate (+)	—	—	mA	
	II	(1-)			T2 (+), Gate (-)	—	—		3
	III	(3-)			T2 (-), Gate (-)	—	—		3
	IV	(3+)			T2 (-), Gate (+)	—	—		—
Peak On-State Voltage			V_{TM}	$I_{TM} = 1.2\text{A}$	—	—	1.5	V	
Gate Non-Trigger Voltage			V_{GD}	$V_D = \text{Rated}, T_c = 125^\circ\text{C}$	0.2	—	—	V	
Holding Current			I_H	$V_D = 12\text{V}, \text{Gate Open}$	—	—	10	mA	
Thermal Resistance			$R_{th(j-c)}$	Junction to Case	—	—	50	$^\circ\text{C/W}$	
Thermal Resistance			$R_{th(j-a)}$	Junction to Ambient	—	—	220	$^\circ\text{C/W}$	

MARKING



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





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