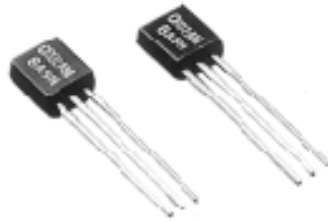


CR02AM-8A

LOW POWER USE
GLASS PASSIVATION TYPE

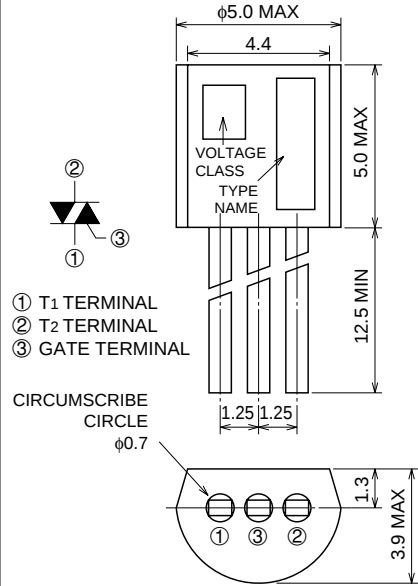
CR02AM-8A



- $I_T (AV)$ 0.3A
- V_{DRM} 400V
- I_{GT} 100 μ A

OUTLINE DRAWING

Dimensions
in mm



JEDEC : TO-92

APPLICATION

Strobe flasher

MAXIMUM RATINGS

Symbol	Parameter	Voltage class	Unit
		8	
VRRM	Repetitive peak reverse voltage	400	V
VRSM	Non-repetitive peak reverse voltage	500	V
VR (DC)	DC reverse voltage	320	V
VDRM	Repetitive peak off-state voltage *1	400	V
Vd (DC)	DC off-state voltage *1	320	V

Symbol	Parameter	Conditions	Ratings	Unit
$I_T (RMS)$	RMS on-state current		0.47	A
$I_T (AV)$	Average on-state current	Commercial frequency, sine half wave, 180° conduction, $T_a=30^\circ C$	0.3	A
I_{TSM}	Surge on-state current	60Hz sine half wave 1 full cycle, peak value, non-repetitive	10	A
I^2_t	I^2_t for fusing	Value corresponding to 1 cycle of half wave 60Hz, surge on-state current	0.4	A ² s
P_{GM}	Peak gate power dissipation		0.1	W
$P_G (AV)$	Average gate power dissipation		0.01	W
V_{FGM}	Peak gate forward voltage		6	V
V_{RGM}	Peak gate reverse voltage		6	V
I_{FGM}	Peak gate forward current		0.1	A
T_j	Junction temperature		-40 ~ +125	°C
T_{stg}	Storage temperature		-40 ~ +125	°C
—	Weight	Typical value	0.23	g

*1. With gate to cathode resistance $R_{GK}=1k\Omega$.

CR02AM-8A

LOW POWER USE
GLASS PASSIVATION TYPE

ELECTRICAL CHARACTERISTICS

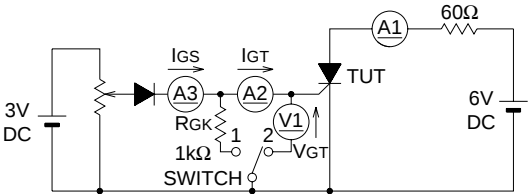
Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
IRRM	Repetitive peak reverse current	Tj=125°C, VRRM applied	—	—	0.1	mA
IDRM	Repetitive peak off-state current	Tj=125°C, VDRM applied, RGK=1kΩ	—	—	0.1	mA
VTM	On-state voltage	Tc=25°C, ITM=0.6A, instantaneous value	—	—	1.6	V
VGT	Gate trigger voltage	Tj=25°C, Vd=6V, IT=0.1A *3	—	—	0.8	V
VGD	Gate non-trigger voltage	Tj=125°C, Vd=1/2VDRM, RGK=1kΩ	0.2	—	—	V
IGT	Gate trigger current	Tj=25°C, Vd=6V, IT=0.1A *3	1	—	100*2	μA
IH	Holding current	Tj=25°C, Vd=12V, RGK=1Ω	—	—	3	mA
Rth (j-a)	Thermal resistance	Junction to ambient	—	—	180	°C/W

*2. If special values of IGT are required, choose at least two items from those listed in the table below. (Example: AB, BC)

Item	A	B	C
IGT (μA)	1 ~ 30	20 ~ 50	40 ~ 100

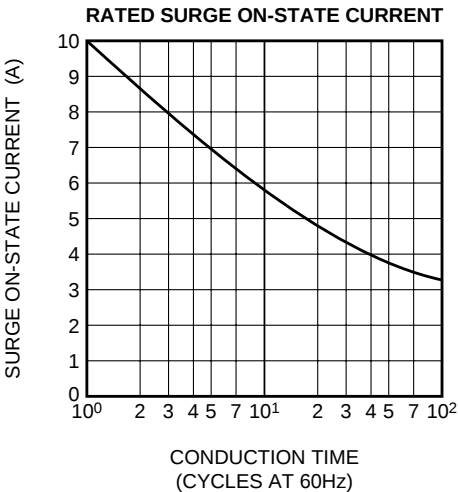
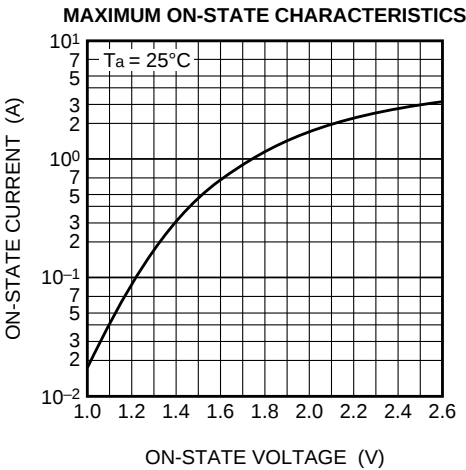
The above values do not include the current flowing through the 1kΩ resistance between the gate and cathode.

*3. IGT, VGT measurement circuit.



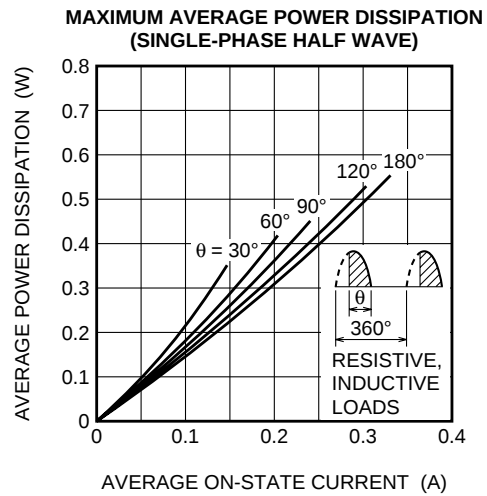
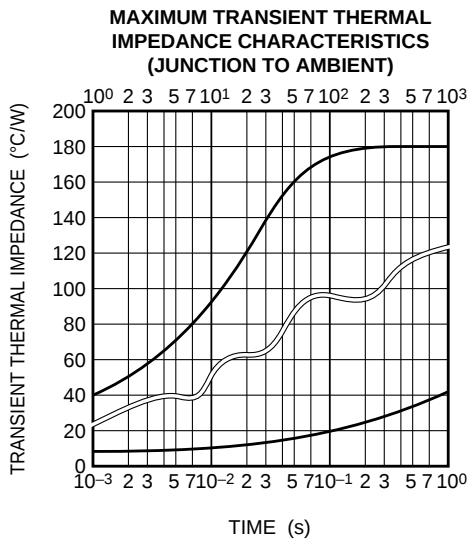
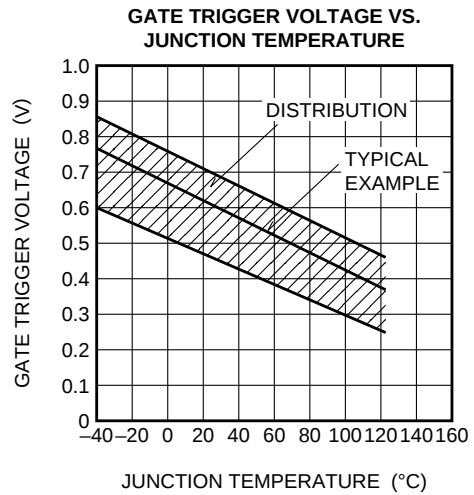
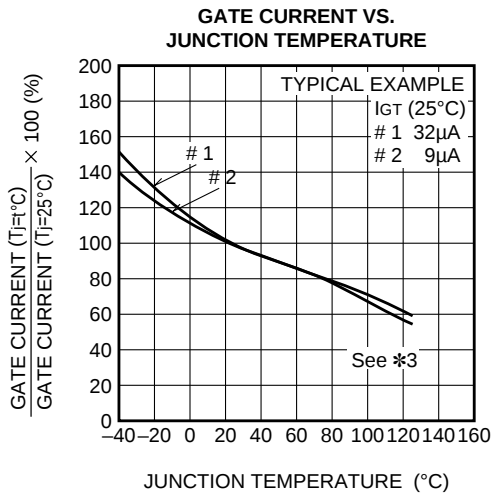
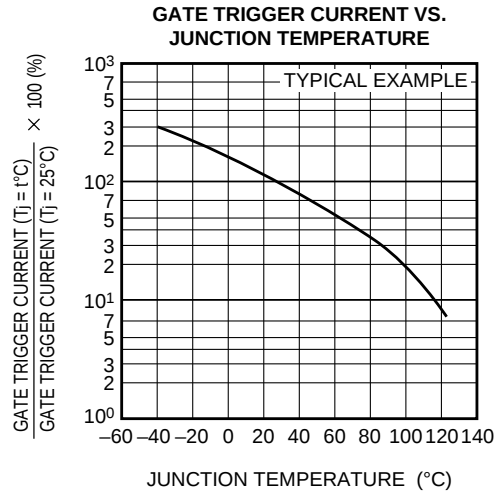
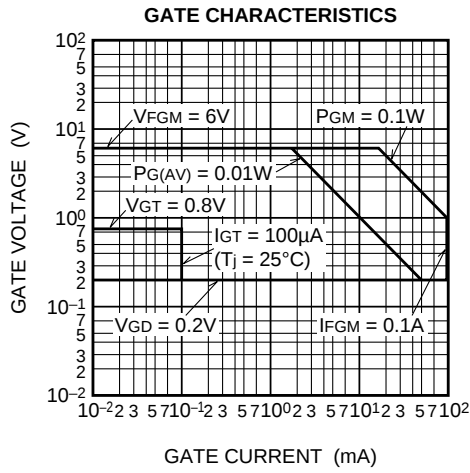
SWITCH 1 : IGT measurement
SWITCH 2 : VGT measurement
(Inner resistance of voltage meter is about 1kΩ)

PERFORMANCE CURVES



CR02AM-8A

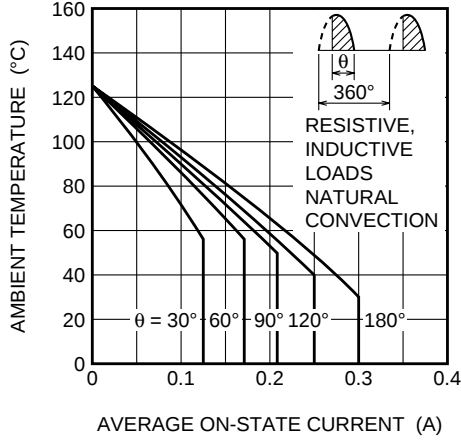
LOW POWER USE
GLASS PASSIVATION TYPE



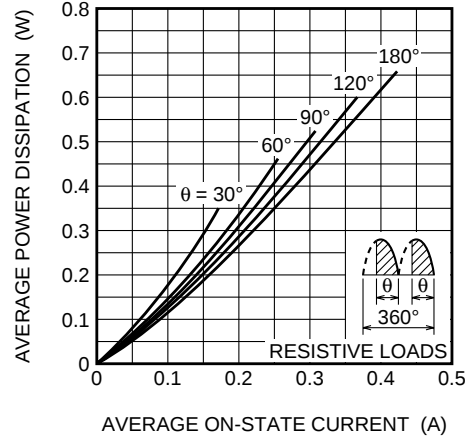
CR02AM-8A

LOW POWER USE
GLASS PASSIVATION TYPE

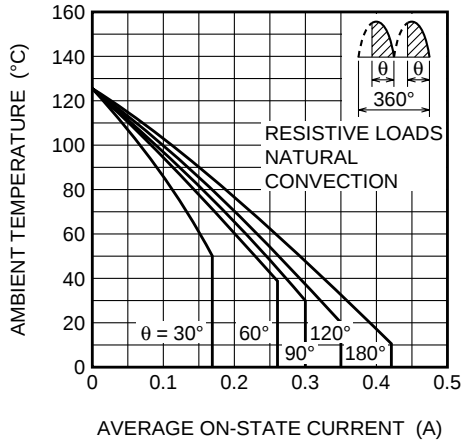
ALLOWABLE AMBIENT TEMPERATURE VS.
AVERAGE ON-STATE CURRENT
(SINGLE-PHASE HALF WAVE)



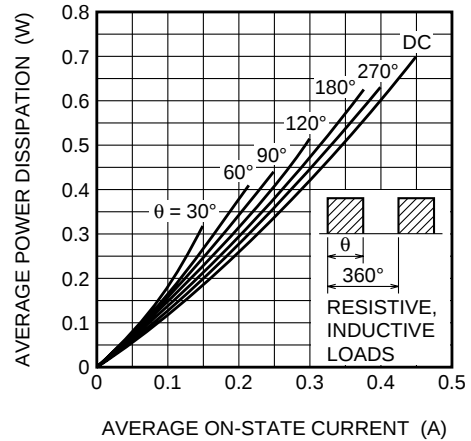
MAXIMUM AVERAGE POWER DISSIPATION
(SINGLE-PHASE FULL WAVE)



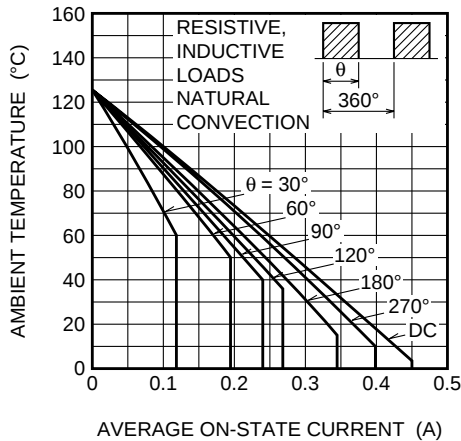
ALLOWABLE AMBIENT TEMPERATURE VS.
AVERAGE ON-STATE CURRENT
(SINGLE-PHASE FULL WAVE)



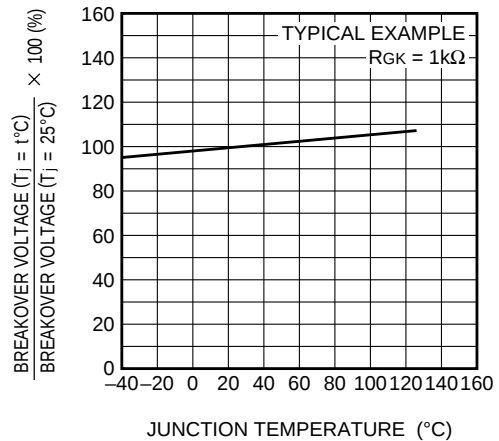
MAXIMUM AVERAGE POWER DISSIPATION
(RECTANGULAR WAVE)



ALLOWABLE AMBIENT TEMPERATURE VS.
AVERAGE ON-STATE CURRENT
(RECTANGULAR WAVE)



BREAKOVER VOLTAGE VS.
JUNCTION TEMPERATURE



CR02AM-8A

LOW POWER USE
GLASS PASSIVATION TYPE

