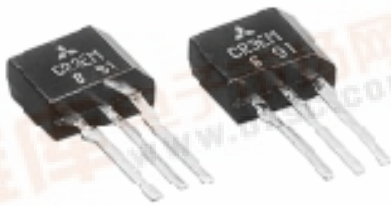


CR3EM

LOW POWER USE

NON-INSULATED TYPE, GLASS PASSIVATION TYPE

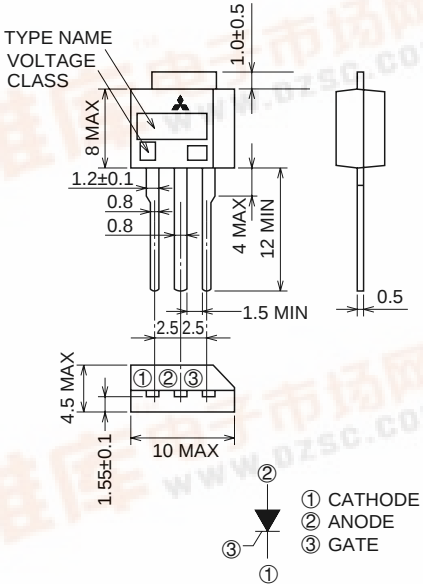
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- I_T (AV)0.6A
- V_{DRM} 400V
- I_{GT} 30mA

OUTLINE DRAWING

Dimensions
in mm



TO-202

APPLICATION

Automatic strobe flasher

MAXIMUM RATINGS

Symbol	Parameter	Voltage class	Unit
		8	
V_{RRM}	Repetitive peak reverse voltage	400	V
V_{RSM}	Non-repetitive peak reverse voltage	500	V
V_R (DC)	DC reverse voltage	320	V
V_{DRM}	Repetitive peak off-state voltage	400	V
V_{DSM}	Non-repetitive peak off-state voltage	600	V

Symbol	Parameter	Conditions	Ratings	Unit
I_T (RMS)	RMS on-state current		0.94	A
I_T (AV)	Average on-state current	Commercial frequency, sine half wave, 180° conduction, $T_a=43^{\circ}\text{C}$	0.6	A
I_{TSM}	Surge on-state current	60Hz sine half wave 1 full cycle, peak value, non-repetitive	70	A
I^2_t	I^2_t for fusing	Value corresponding to 1 cycle of half wave 60Hz, surge on-state current	20	A^2s
P_{GM}	Peak gate power dissipation		2.0	W
P_G (AV)	Average gate power dissipation		0.2	W
V_{FGM}	Peak gate forward voltage		6	V
V_{RGM}	Peak gate reverse voltage		6	V
I_{FGM}	Peak gate forward current		1	A
T_j	Junction temperature		$-40 \sim +125$	$^{\circ}\text{C}$
T_{stg}	Storage temperature		$-40 \sim +125$	$^{\circ}\text{C}$
—	Weight	Typical value	1.1	g

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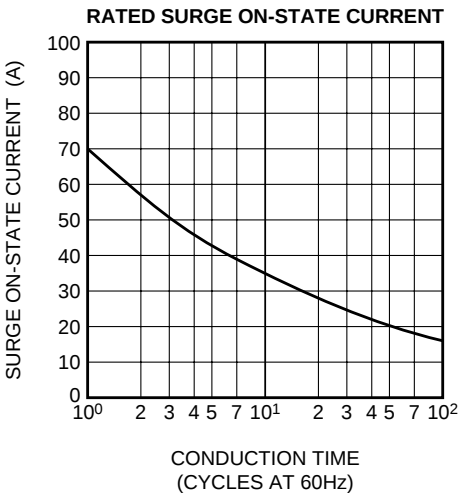
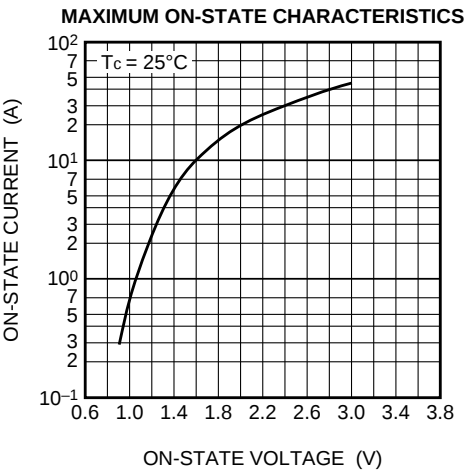
LOW POWER USE

NON-INSULATED TYPE, GLASS PASSIVATION TYPE

ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Test conditions	Limits			Unit
			Min.	Typ.	Max.	
IRRM	Repetitive peak reverse current	$T_J=125^{\circ}\text{C}$, V_{RRM} applied	—	—	0.1	mA
IDRM	Repetitive peak off-state current	$T_J=125^{\circ}\text{C}$, V_{DRM} applied	—	—	0.1	mA
VTM	On-state voltage	$T_c=25^{\circ}\text{C}$, $I_{TM}=10\text{A}$, instantaneous value	—	—	1.6	V
VGT	Gate trigger voltage	$T_J=25^{\circ}\text{C}$, $V_D=6\text{V}$, $I_T=0.5\text{A}$	—	—	1.5	V
VGD	Gate non-trigger voltage	$T_J=125^{\circ}\text{C}$, $V_D=1/2V_{DRM}$	0.2	—	—	V
IGT	Gate trigger current	$T_J=25^{\circ}\text{C}$, $V_D=6\text{V}$, $I_T=0.5\text{A}$	—	—	30	mA
IH	Holding current	$T_J=25^{\circ}\text{C}$, $V_D=12\text{V}$	25	45	—	mA
Rth (j-a)	Thermal resistance	Junction to ambient	—	—	120	$^{\circ}\text{C/W}$

PERFORMANCE CURVES

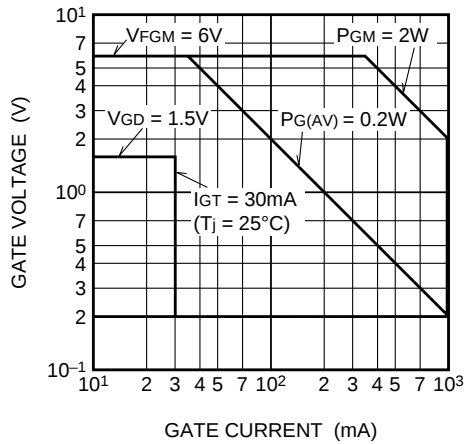


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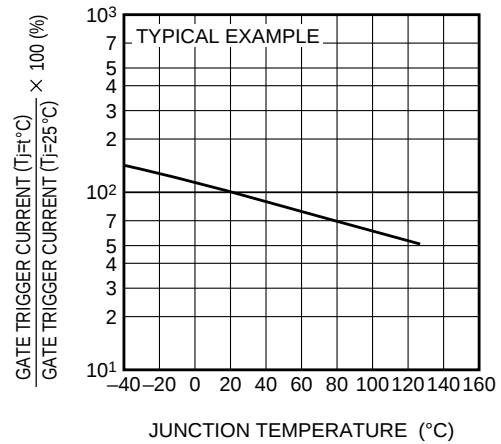
LOW POWER USE

NON-INSULATED TYPE, GLASS PASSIVATION TYPE

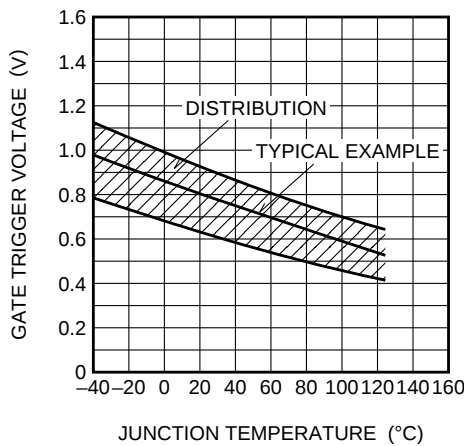
GATE CHARACTERISTICS



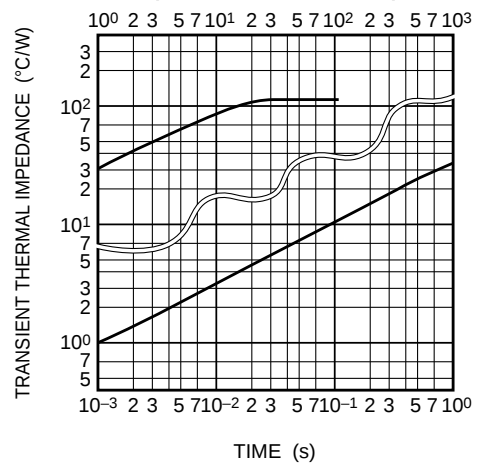
GATE TRIGGER CURRENT VS. JUNCTION TEMPERATURE



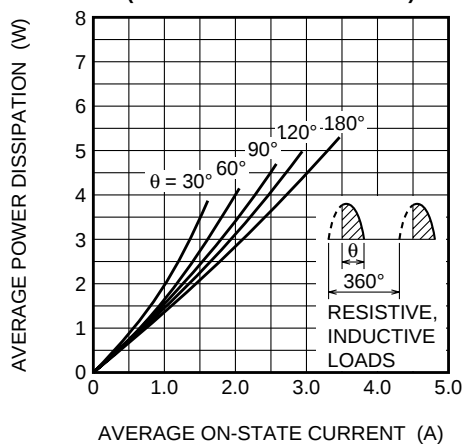
GATE TRIGGER VOLTAGE VS. JUNCTION TEMPERATURE



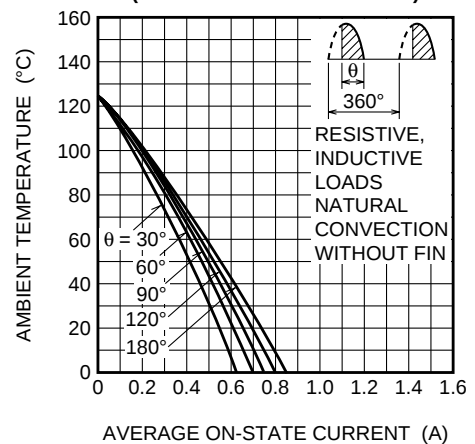
MAXIMUM TRANSIENT THERMAL IMPEDANCE CHARACTERISTICS (JUNCTION TO AMBIENT)



MAXIMUM AVERAGE POWER DISSIPATION (SINGLE-PHASE HALF WAVE)



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

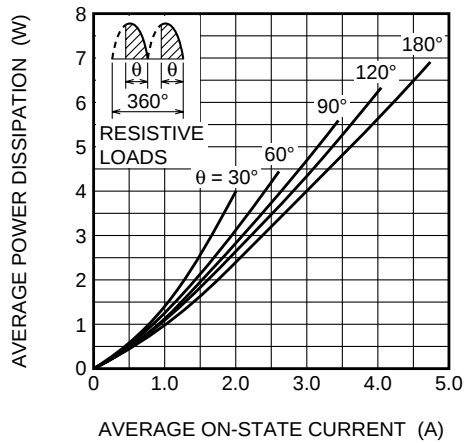


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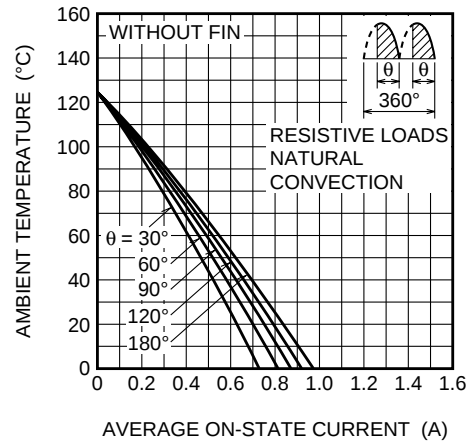
LOW POWER USE

NON-INSULATED TYPE, GLASS PASSIVATION TYPE

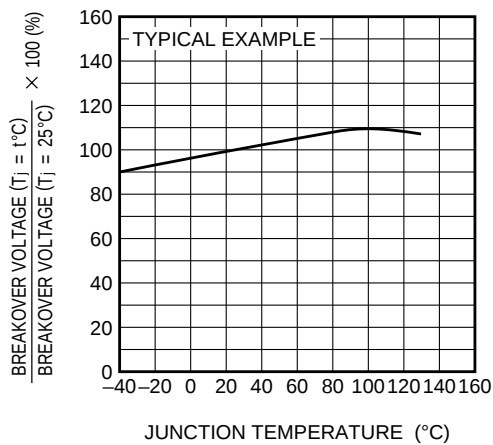
MAXIMUM AVERAGE POWER DISSIPATION
(SINGLE-PHASE FULL WAVE)



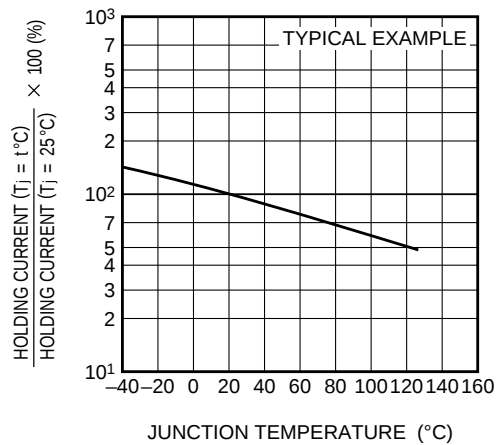
ALLOWABLE AMBIENT TEMPERATURE VS.
AVERAGE ON-STATE CURRENT
(SINGLE-PHASE FULL WAVE)



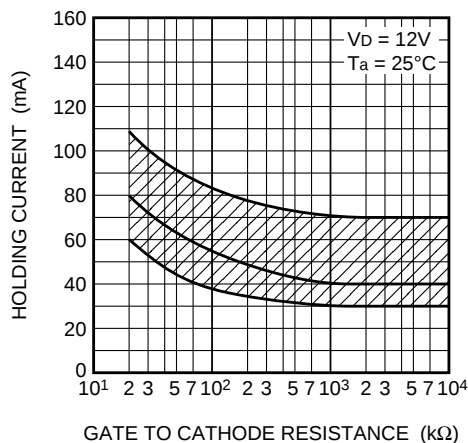
BREAKOVER VOLTAGE VS.
JUNCTION TEMPERATURE



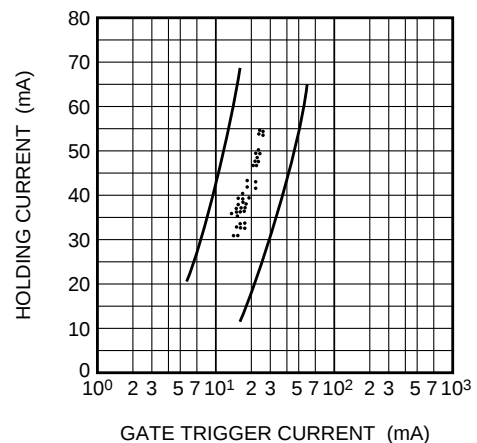
HOLDING CURRENT VS.
JUNCTION TEMPERATURE



HOLDING CURRENT VS.
GATE TO CATHODE RESISTANCE



HOLDING CURRENT VS.
GATE TRIGGER CURRENT



CR3EM

LOW POWER USE

NON-INSULATED TYPE, GLASS PASSIVATION TYPE

