

# **CR3AS-8ME**

400V - 3A - Thyristor Low Power Use

#### **Features**

- I<sub>T (AV)</sub>: 3 A
- V<sub>DRM</sub> : 400 V
- I<sub>GT</sub>: 30 mA

## Outline

RENESAS Package code: PRSS0004ZG-A (Package name: MP-3A)



1. Cathode 2, 4 2. Anode

Non-Insulated Type

Planar Type

#### 3. Gate 4. Anode

## **Maximum Ratings**

Parameter	Symbol	Voltage class	Unit	
Farameter	Symbol	8		
Repetitive peak reverse voltage	V <sub>RRM</sub>	400	V	
Non-repetitive peak reverse voltage	V <sub>RSM</sub>	500	V	
Repetitive peak off-state voltage Note1	V <sub>DRM</sub>	400	V	

Parameter	Symbol	Ratings	Unit	Conditions
RMS on-state current	I <sub>T(RMS)</sub>	4.7	А	
Average on-state current	$I_{T(AV)}$	3	A	Commercial frequency, sine half wave 180° conduction, Tc = 95°C
Surge on-state current	I <sub>TSM</sub>	70	A	60Hz sine half wave, 1full cycle, peak value, non-repetitive
I <sup>2</sup> t for fusing	l <sup>2</sup> t	20	A <sup>2</sup> s	Value corresponding to 1cycle of half wave 60Hz, surge on-state current
Peak gate power dissipation	P <sub>GM</sub>	3	W	
Average gate power dissipation	P <sub>G(AV)</sub>	0.5	W	
Peak gate forward voltage	V <sub>FGM</sub>	10	V	
Peak gate reverse voltage	V <sub>RGM</sub>	10	V	
Peak gate forward current	I <sub>FGM</sub>	0.5	А	
Junction temperature	Tj	- 40 to +125	°C	
Storage temperature	Tstg	- 40 to +125	°C	
Mass	_	0.32	g	Typical value



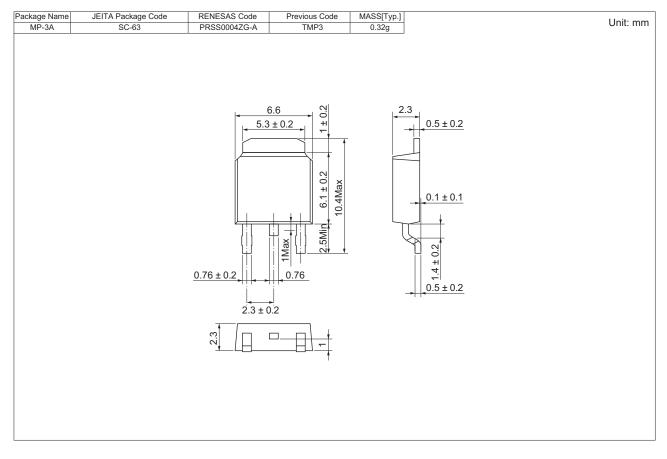
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## **Electrical Characteristics**

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test conditions
Repetitive peak reverse current	I <sub>RRM</sub>	—	_	2.5	mA	Tj = 125°C, V <sub>RRM</sub> applied
Repetitive peak off-state current	I <sub>DRM</sub>	—	_	2.5	mA	Tj = 125°C, V <sub>DRM</sub> applied
On-state voltage	V <sub>TM</sub>	—	—	2.0	V	$Tj = 25^{\circ}C, I_{TM} = 3 A$
						instantaneous value
Gate trigger voltage	V <sub>GT</sub>	—	_	2.0	V	$Tj = 25^{\circ}C, V_D = 6 V, I_T = 1 A$
Gate non-trigger voltage	$V_{GD}$	0.2		_	V	$Tj = 125^{\circ}C, V_D = 1/2 V_{DRM}$
Gate trigger current	I <sub>GT</sub>	1		30	mA	$Tj = 25^{\circ}C, V_D = 6 V, I_T = 1 A$
Holding current	Iн	—	30		mA	$Tj = 25^{\circ}C, V_{D} = 12 V$
Thermal resistance	R <sub>th(j-c)</sub>	—		2.8	°C/W	Junction to case Note1

Notes: 1. The measurement point for case temperature is at anode tab.

## Package dimensions



#### **Ordering Information**

Orderable Part Number	Packing	Quantity	Remark
CR3AS-8ME#B00	Tube	75 pcs.	
CR3AS-8ME-T13#B00	Embossed Tape	3000 pcs.	Taping direction "T1"

Note : Please confirm the specification about the shipping in detail.



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