



# Product data sheet

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2.ANODE

3.GATE

1.KATHODE

SOT-89

#### FEATURES

Current-I<sub>GT</sub>: 200  $\mu$ A I<sub>TRMS</sub>: 0.8 A V<sub>RRM</sub>/ V<sub>DRM</sub>: MCR100-6/MS: 400 V MCR100-8/MS: 600 V Operating and storage junction temperature range T<sub>J</sub>, T<sub>stg</sub>: -55°C to +150°C



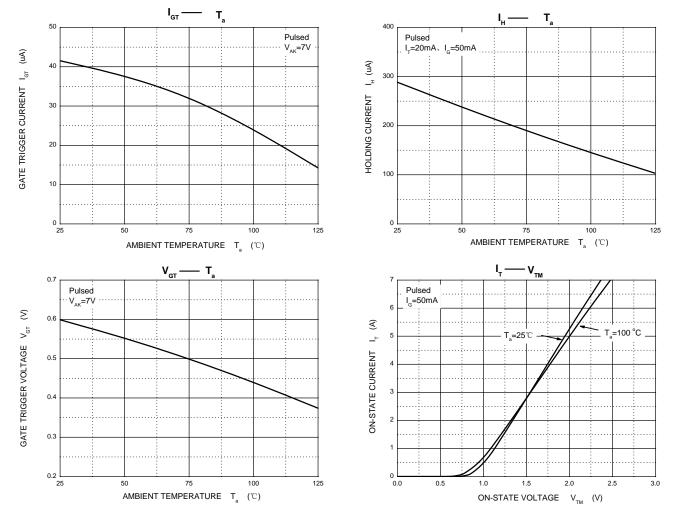
### ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol		Test conditions	Min	Мах	Unit
On state voltage	V <sub>TM</sub> *		I <sub>TM</sub> =1A		1.7	V
Gate trigger voltage	V <sub>GT</sub>		V <sub>AK</sub> =7V		0.8	V
Peak Repetitive forward and reverse blocking voltage MCR100-6 MCR100-8	V <sub>drm</sub> and Vrrm		I <sub>DRM</sub> = 10 μA	400 600		v
Peak forward or reverse blocking Current	I <sub>DRM</sub> I <sub>RRM</sub>		V <sub>AK</sub> = Rated V <sub>DRM</sub> or V <sub>RRM</sub>		10	μA
Holding current	Iн		$I_{HL}$ = 20mA ,Vak = 7V		5	mA
	I <sub>GT</sub>	A2	V <sub>AK</sub> =7V	5	15	μA
		A1		15	30	μA
Gate trigger current		А		30	80	μΑ
		В		80	200	μΑ

\* Forward current applied for 1 ms maximum duration, duty cycle  ${\leqslant}1\%_{\circ}$ 





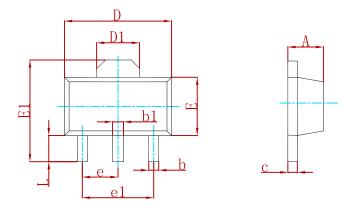


**Typical Characteristics** 



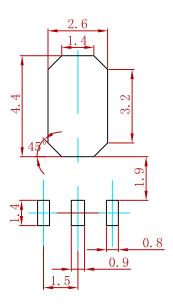


## PACKAGE MECHANICAL DATA



Symbol	Dimensions	In Millimeters	Dimensions In Inches			
Symbol	Min Max		Min	Max		
А	1.400	1.600	0.055	0.063		
b	0.320	0.520	0.013	0.020		
b1	0.400	0.580	0.016	0.023		
С	0.350	0.440	0.014	0.017		
D	4.400	4.600	0.173	0.181		
D1	1.550	REF.	0.061 REF.			
E	2.300	2.600	0.091	0.102		
E1	3.940	4.250	0.155	0.167		
е	1.500 TYP.		0.060 TYP.			
e1	3.000	3.000 TYP.		0.118 TYP.		
L	0.900	1.200	0.035	0.047		

# Suggested Pad Layout



Note:

1.Controlling dimension:in millimeters.

2.General tolerance:±0.05mm.

3. The pad layout is for reference purposes only.

## **REEL SPECIFICATION**

P/N	PKG	QTY
MCR100-X/MS	SOT-89	1000



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