

SOT-23 Plastic-Encapsulate Thyristors

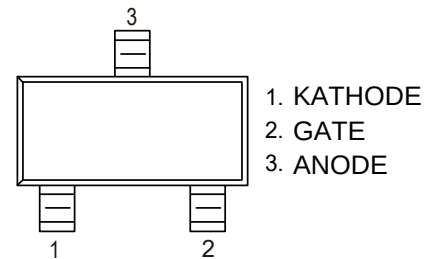
MCR100- 6 , - 8 Silicon Controlled Rectifier

SOT-23

ROHS
COMPLIANT

FEATURES

- Current- I_{GT} : 200 μA
- I_{TRMS} : 0.8 A
- V_{RRM}/V_{DRM} : MCR100-6: 400 V
MCR100-8: 600 V
- Operating and storage junction temperature range
 T_J, T_{stg} : -55°C to +150°C



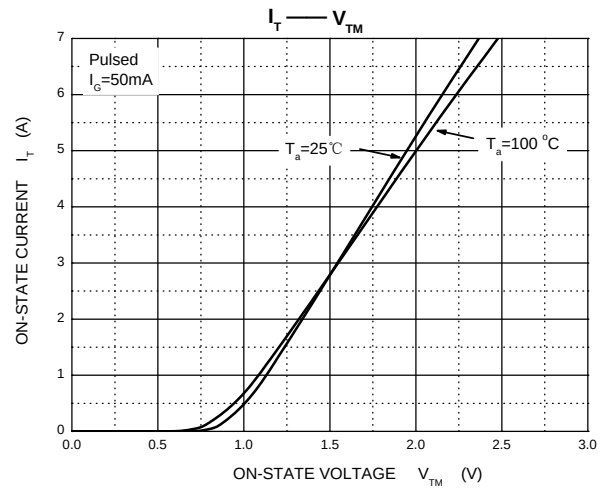
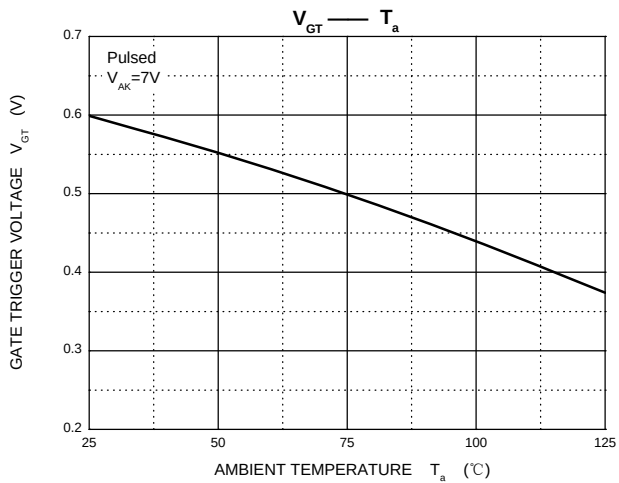
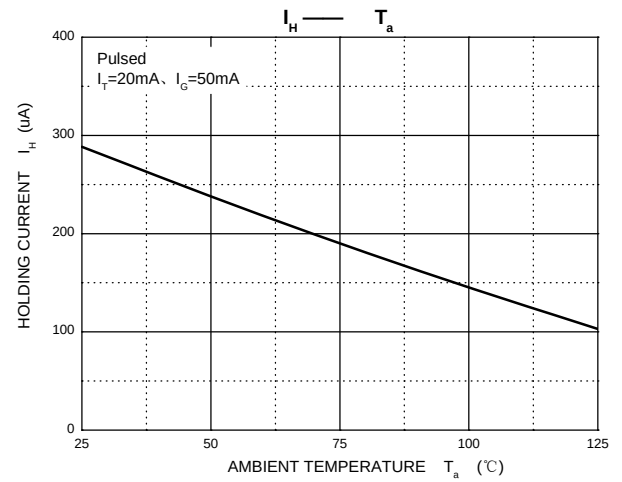
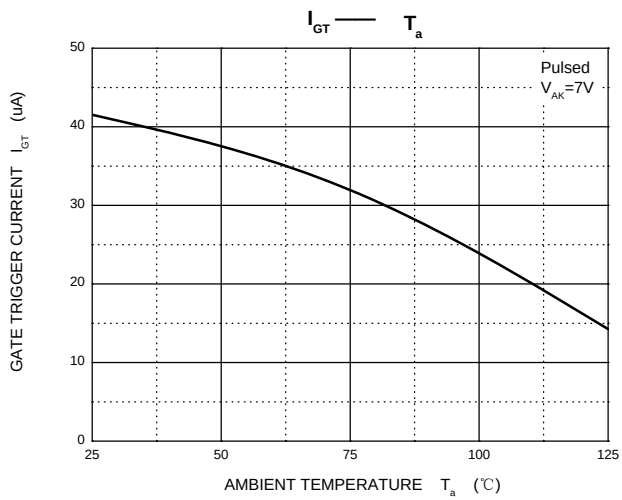
Part Number	Marking
MCR100-6	100-6
MCR100-8	100-8

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

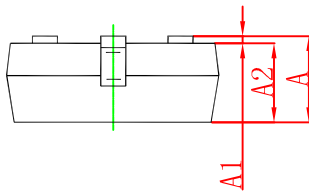
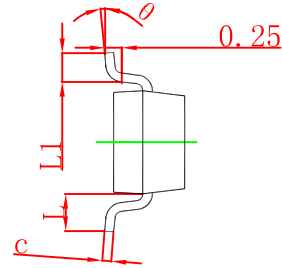
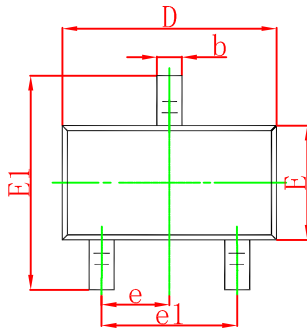
Parameter	Symbol	Test conditions	Min	Max	Unit
On state voltage	V_{TM}^*	$I_{TM}=1A$		1.7	V
Gate trigger voltage	V_{GT}	$V_{AK}=7V$		0.8	V
Peak Repetitive forward and reverse blocking voltage MCR100-6 MCR100-8	V_{DRM} AND V_{RRM}	$I_{DRM}=10\mu A$	400 600		V
Peak forward or reverse blocking Current	I_{DRM} I_{RRM}	$V_{AK}= \text{Rated}$ V_{DRM} or V_{RRM}		10	μA
Holding current	I_H	$I_{HL}=20mA, V_{AK}=7V$		5	mA
Gate trigger current	I_{GT}	$V_{AK}=7V$	5	15	μA
			15	30	μA
			30	80	μA
			80	200	μA

* Forward current applied for 1 ms maximum duration, duty cycle $\leq 1\%$.

Typical Characteristics

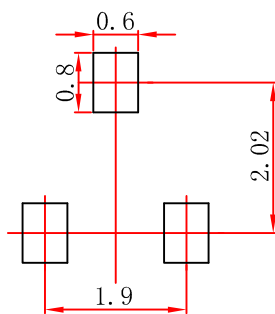


SOT-23 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.400	0.035	0.055
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.350	0.500	0.014	0.020
c	0.080	0.190	0.003	0.007
D	2.700	3.100	0.106	0.122
E	1.200	1.650	0.047	0.065
E1	2.200	3.000	0.087	0.118
e	0.950 TYP		0.037 TYP	
e1	1.780	2.040	0.070	0.080
L	0.550 REF		0.022 REF	
L1	0.200	0.500	0.008	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:

1. Controlling dimension: in/millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.