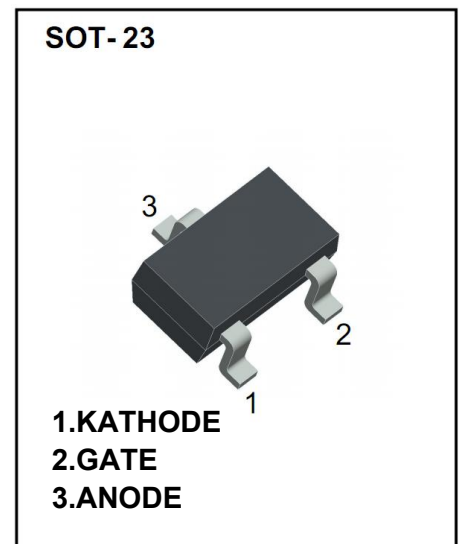


Silicon Controlled Rectifiers

Equivalent Circuit:



These devices are intended to be interfaced directly to microcontrollers, logic integrated circuits and other low power gate trigger circuits.

Weight : 0.22 gram

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

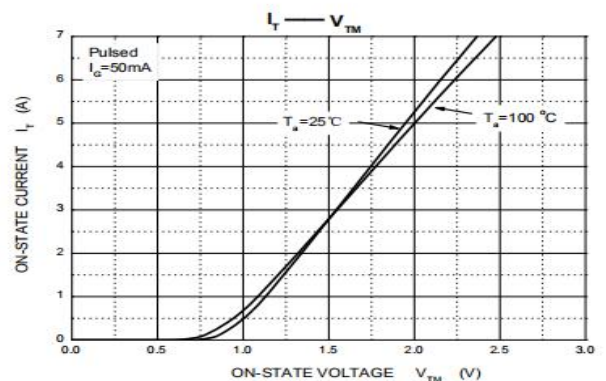
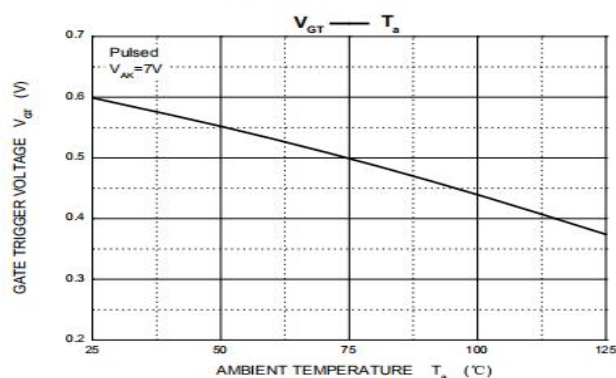
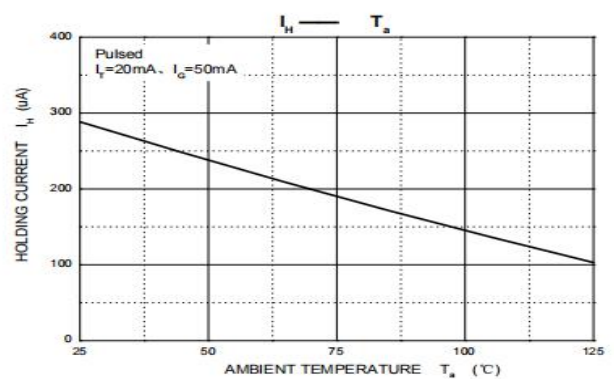
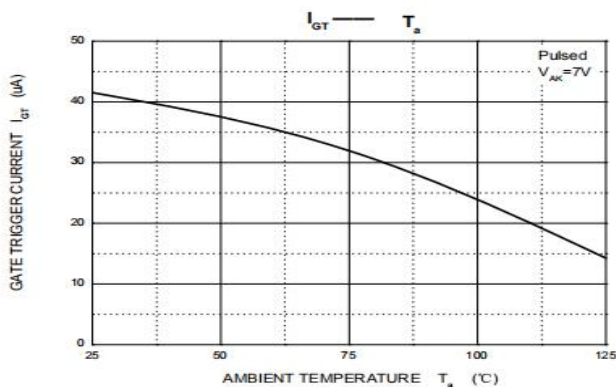
Rating	Symbol	MCR100-6	MCR100-8	Unit
Repetitive Peak Off-stage Voltage	VDRM	400	600	V
Collector-Base Voltage	ITRMS	0.8		A
Gate Trigger Current	IGT(Q1)	200		μA
Junction Temperature Range	TJ	+150		°C
Storage Temperature Range	TStg	-55 to +150		°C

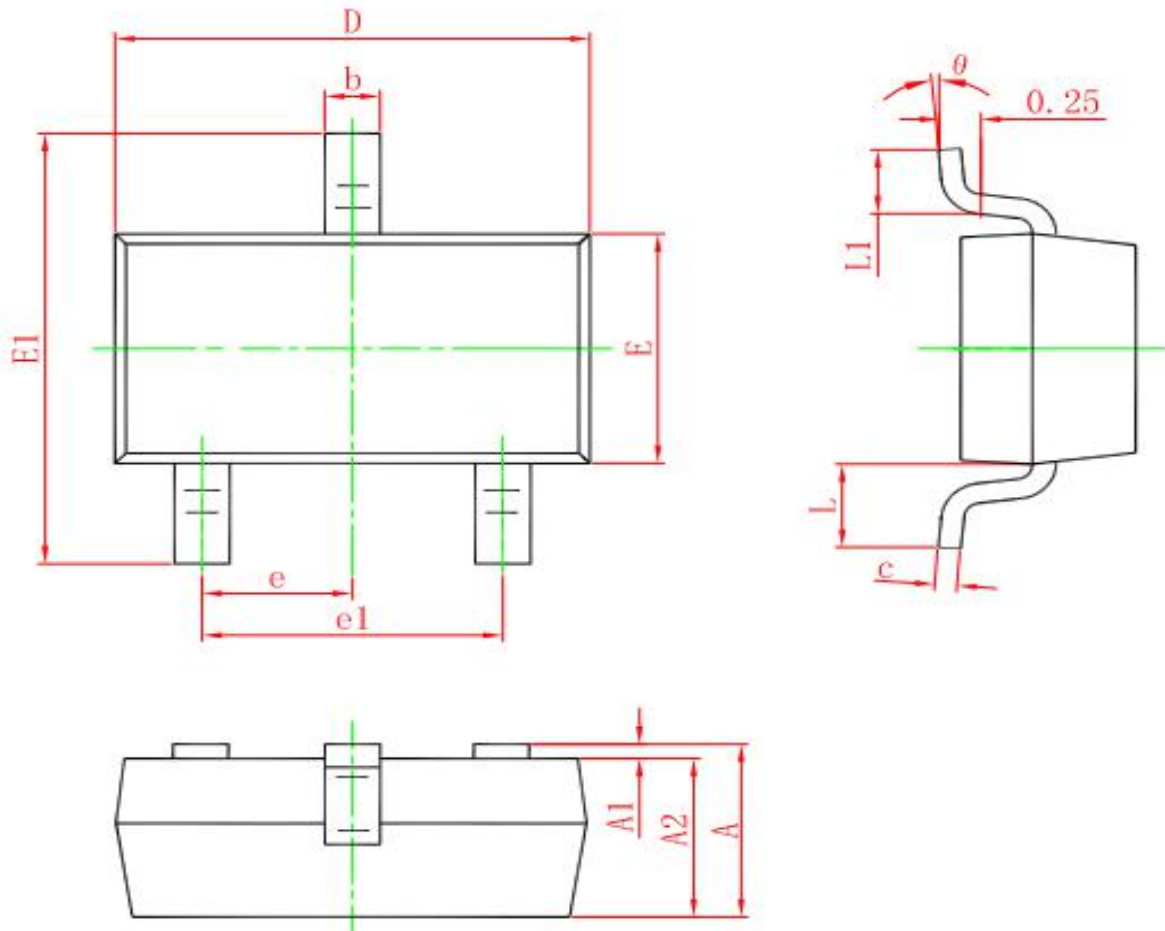
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Max	Unit	
On state voltage	V _{TM} *	I _{TM} =1A			V	
Gate trigger voltage	V _{GT}	V _{AK} =7V			V	
Peak Repetitive forward and reverse blocking voltage MCR100-6 MCR100-8	V _{DRM} AND V _{RRM}	I _{DRM} =10μA	400 600		V	
Peak forward or reverse blocking Current	I _{DRM} I _{RRM}	V _{AK} =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	A2	5	15	μA
			A1	15	30	μA
			A	30	80	μA
			B	80	200	μA

* Forward current applied for 1 ms maximum duration, duty cycle ≤ 1%.

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS



SOT-23 PACKAGE OUTLINE DIMENSIONS


Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP.		0.037 TYP.	
e1	1.800	2.000	0.071	0.079
L	0.550 REF.		0.022 REF.	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°