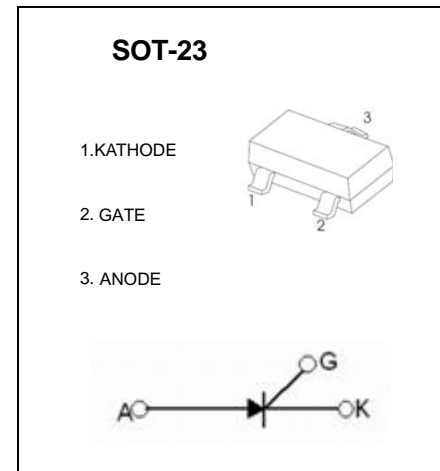


## SOT-23 Plastic-Encapsulate Thyristors

### MCR100- 6 , - 8 Silicon Controlled Rectifier

#### FEATURES

- Current- $I_{GT}$ : 200  $\mu$ A
- $I_{TRMS}$ : 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



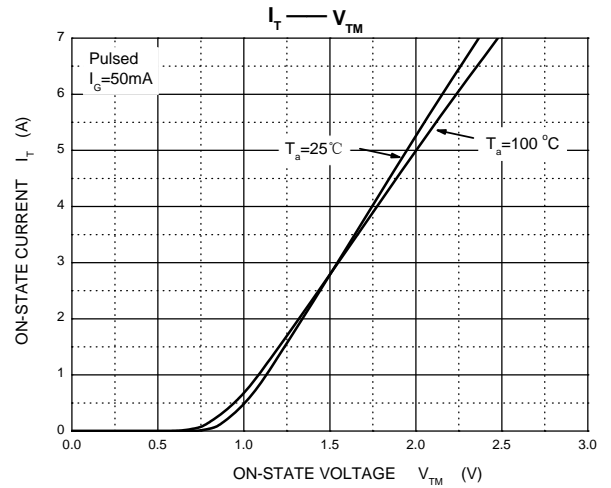
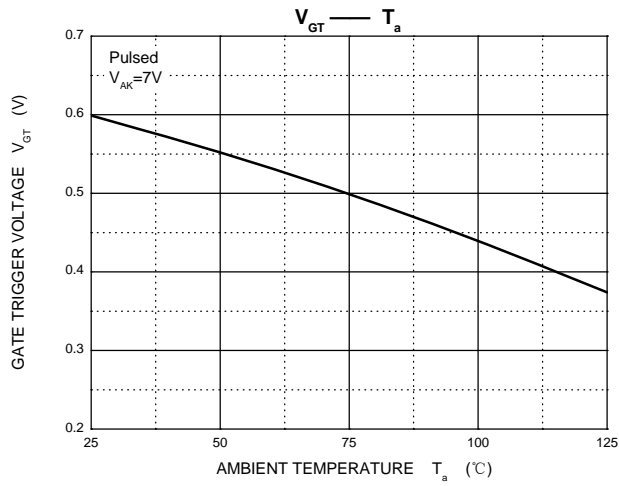
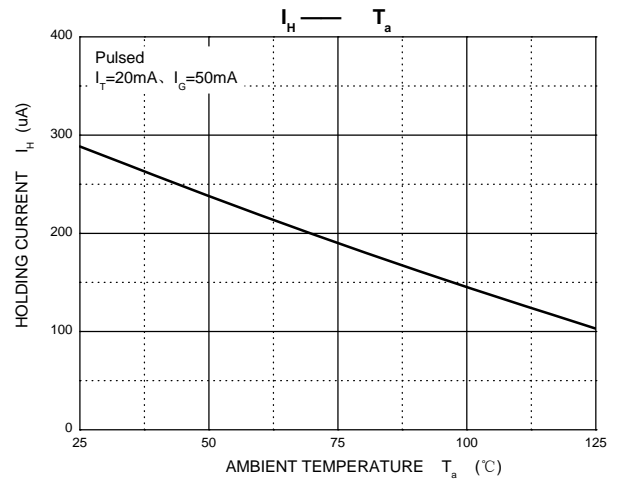
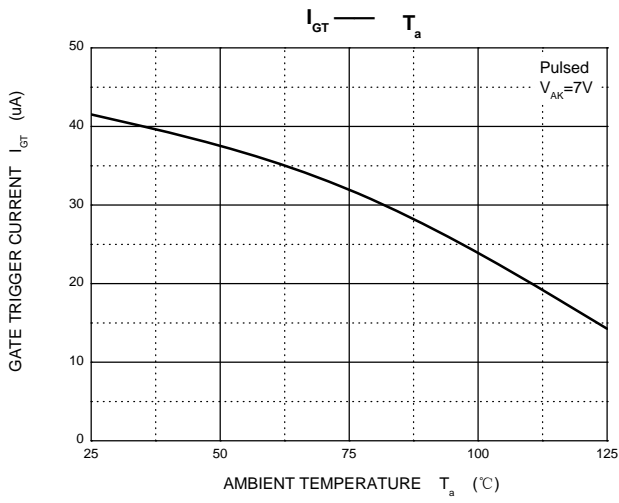
#### ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

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	$\mu A$	
Holding current	$I_H$	$I_{HL}= 20mA, V_{AK} = 7V$		5	mA	
Gate trigger current	$I_{GT}$	$V_{AK}=7V$	A2	5	15	$\mu A$
			A1	15	30	$\mu A$
			A	30	80	$\mu A$
			B	80	200	$\mu A$

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



## Typical Characteristics

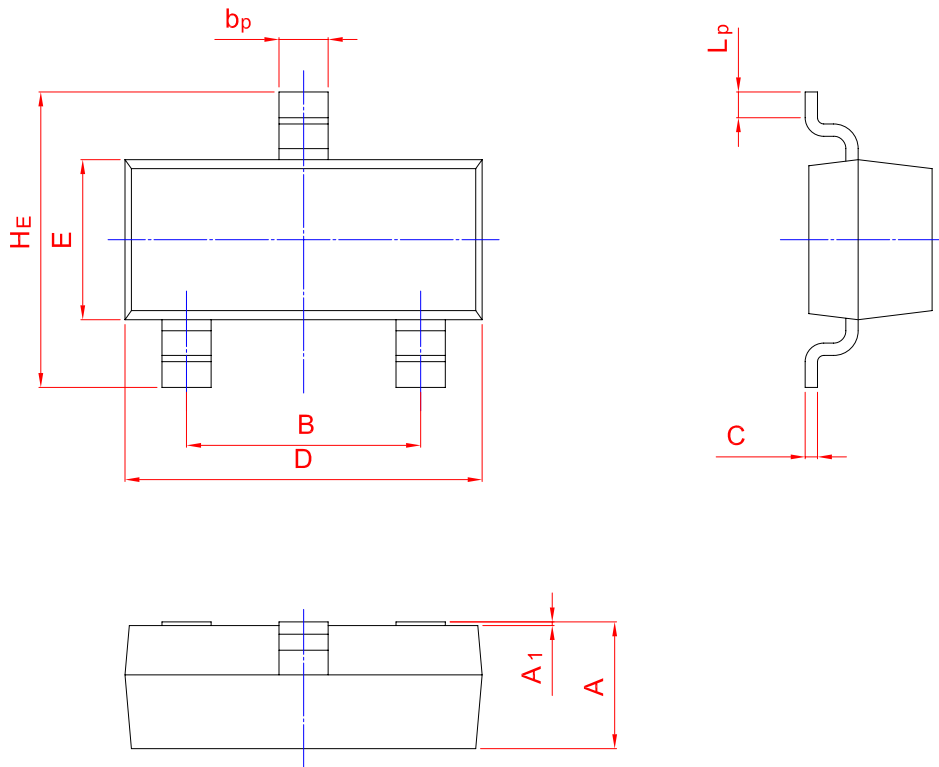
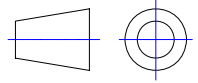




## PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	b <sub>p</sub>	C	D	E	H <sub>E</sub>	A <sub>1</sub>	L <sub>p</sub>
mm	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20