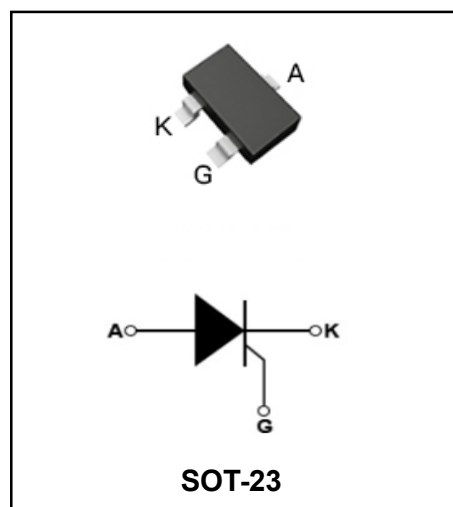


## 0.8A Sensitive Gate SCRs

### Product Summary

| Symbol              | Value   | Unit |
|---------------------|---------|------|
| $I_{T(RMS)}$        | 0.8     | A    |
| $V_{DRM}$ $V_{RRM}$ | 400/600 | V    |
| $V_{TM}$            | 1.7     | V    |



### Marking Code

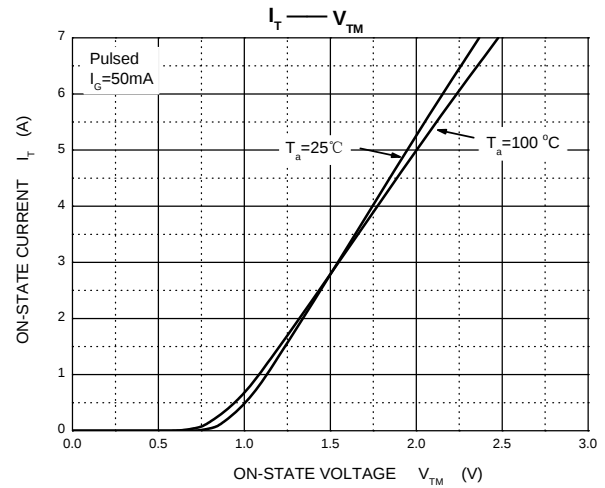
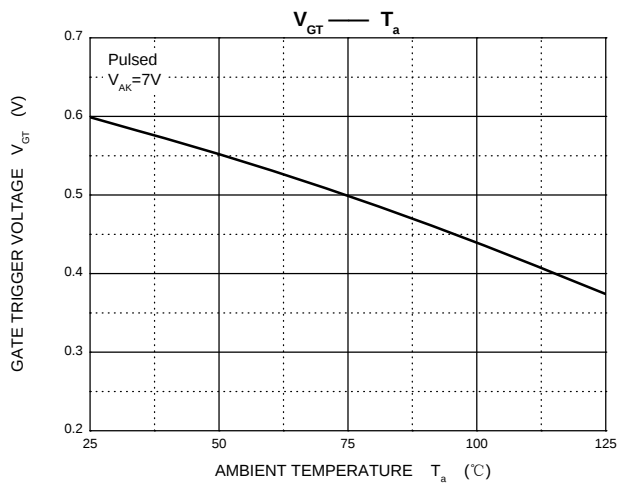
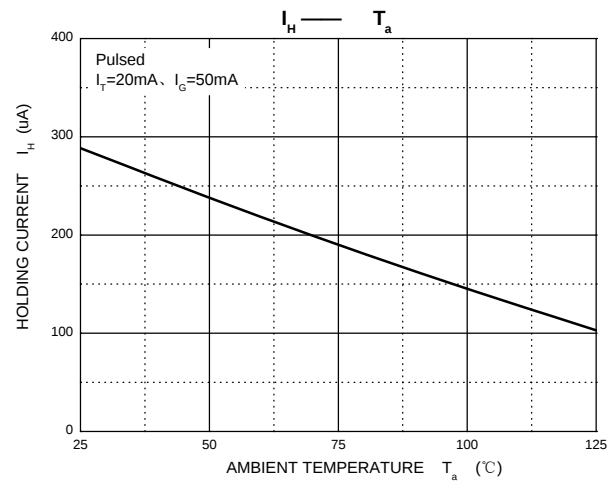
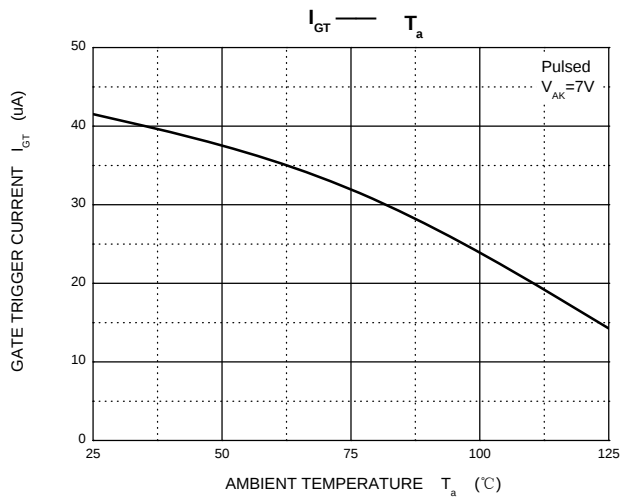
|                 |              |
|-----------------|--------------|
| <b>MCR100-6</b> | <b>100-6</b> |
| <b>MCR100-8</b> | <b>100-8</b> |

### 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<br>MCR100-6<br>MCR100-8 | $V_{DRM}$<br>AND<br>$V_{RRM}$ | $I_{DRM}=10\mu A$                                    | 400<br>600 |     | V       |
| Peak forward or reverse blocking Current                                     | $I_{DRM}$<br>$I_{RRM}$        | $V_{AK} = \text{Rated } V_{DRM} \text{ or } V_{RRM}$ |            | 10  | $\mu A$ |
| Holding current                                                              | $I_H$                         | $I_{HL}=20mA, V_{AK}=7V$                             |            | 5   | mA      |
| Gate trigger current                                                         | $I_{GT}$                      | $V_{AK}=7V$                                          | 5          | 15  | $\mu A$ |
|                                                                              |                               |                                                      | 15         | 30  | $\mu A$ |
|                                                                              |                               |                                                      | 30         | 80  | $\mu A$ |
|                                                                              |                               |                                                      | 80         | 200 | $\mu A$ |
| Junction Temperature                                                         | $T_J$                         |                                                      | -55+150    |     | °C      |
| Storage Temperature                                                          | $T_{STG}$                     |                                                      | -55+150    |     | °C      |

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

Typical Characteristics



**Ordering information**

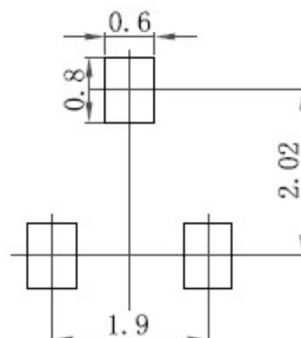
| Package | Packing Description | Base Quantity | Packing Quantity              |
|---------|---------------------|---------------|-------------------------------|
| SOT-23  | Tape/Reel, 7" reel  | 3000pcs/Reel  | 24000PCS/Box 120000PCS/Carton |

**Package Dimensions**

**SOT-23**

| Dim. | Millimeter (mm) |      | mil  |      |
|------|-----------------|------|------|------|
|      | Min.            | Max. | Min. | Max. |
| A    | 0.9             | 1.15 | 35   | 45   |
| A1   | 0.1             |      | 3.9  |      |
| bp   | 0.38            | 0.48 | 15   | 19   |
| C    | 0.09            | 0.15 | 3.54 | 5.9  |
| D    | 2.8             | 3.0  | 110  | 118  |
| E    | 1.2             | 1.4  | 47   | 55   |
| E    | 1.9             |      | 75   |      |
| E1   | 0.95            |      | 37   |      |
| HE   | 2.1             | 2.55 | 83   | 100  |
| Lp   | 0.15            | 0.45 | 5.9  | 18   |
| Q    | 0.45            | 0.55 | 18   | 22   |
| v    | 0.2             |      | 7.9  |      |
| W    | 0.1             |      | 4    |      |

**The recommended mounting pad size**



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