**1700V SiC Power MOSFET Module**

# 1 Maximum ratings

**Table 1** **Maximum rating** (Tc = 25°C unless otherwise specified)

| Symbol | Parameter | Value | Unit | Test Conditions | Note |
|---|---|---|---|---|---|
| $V_{DS,max}$ | Drain source voltage | 1700 | V | $V_{GS}$ | |

# 2 Packaging characteristics

## Table 2 Package characteristics

| Symbol | Description | Value | Unit | Note |
|---|---|---|---|---|
| $R_{HS}$ | High-side Resistance | 2.5 | mΩ | |
| $R_{LS}$ | Low-side Resistance | 2.5 | | |
| Ls | Stray inductance | 18 | nH | |

[1] Not subject to production test. Parameter verified by design/characterization.

# S1P03R170HBG-C Preliminary

Datasheet

# S1P03R170HBG-C Preliminary

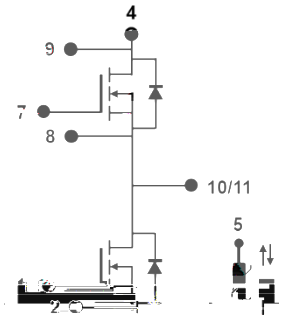
# S1P03R170HBG-C Preliminary

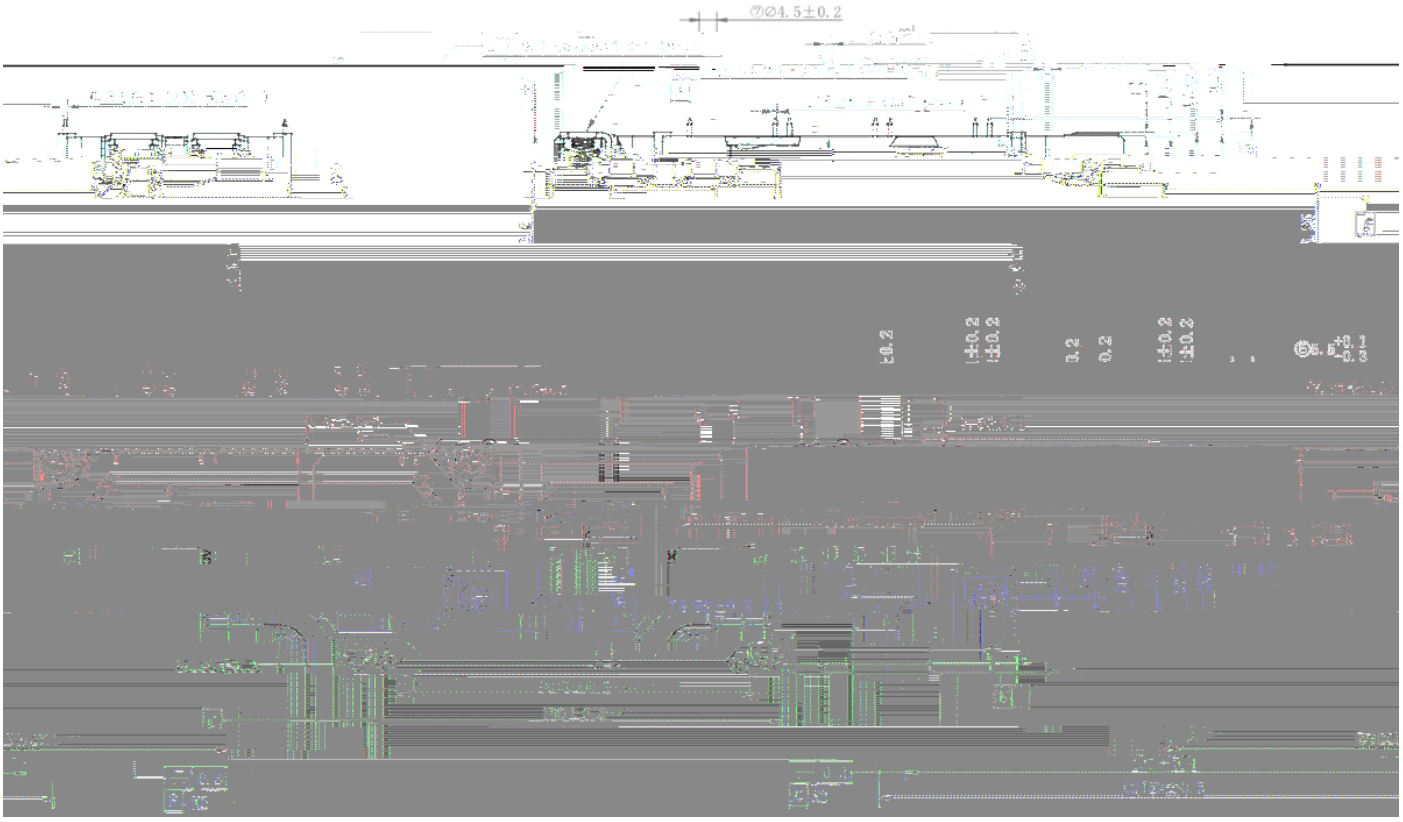
Figure 7. Threshold voltage VS. $T_J$

Figure 8. Capacitance VS. $V_{DS}$

Figure 9. Capacitance VS. $V_{DS}$

## 5 Package drawing



# Revision history

**Document**

7. Except as otherwise explicitly approved by Sichain in a written document signed by authorized representatives of Sichain, Sichain' products may not be used in any applications where a failure of the product or any consequences of the use thereof can reasonably be expected to result in personal injury.

8. For use of our products in applications requiring a high degree of reliability (as exemplified below), please contact and consult with a Sichain representatives, for example but not limited to: transportation equipment, primary communication equipment, traffic lights, fire/crime prevention, safety equipment, medical systems, and power transmission systems.