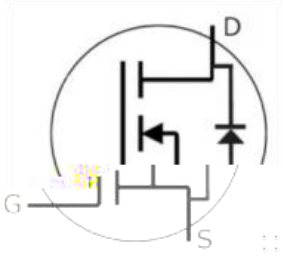
# SG2M020170BJ

**TriQSiC™ 1700V Silicon Carbide Power MOSFET G2**

## Features

- 
- 
- 
- 
- 




## Benefits

- 
- 
- 
- 
- 

| Part number | Die size W x L mm |
|---|---|
| | |

## Applications

- 
- 
- 
- 

**Table 1 Key performance and package parameters**

| Type | $V_{DS}$ | $I_{DS}$ ≤ | $R_{DS(on),\ typ}$ | $T_{J,max}$ |
|---|---|---|---|---|
| | | | | |

# Table of contents


**Features** ..... 1

**Benefits** ..... 1

**Applications** ..... 1

**Table of contents** ..... 2

**1 Maximum ratings** ..... 3

**2 Electrical characteristics** ..... 4

**2.1 Static characteristics** ..... 4

**2.2 Dynamic characteristics** ..... 4

**2.3 Switching characteristics** ..... 5

**3 Electrical characteristic diagrams** ..... 6

**4 Mechanical parameters** ..... 9

**4.1 Dimensions and metallization** ..... 9

**4.2 Layout** ..... 9

**5 Test conditions** ..... 10

**Revision history** ..... 11

**Attention** ..... 11

## 1 Maximum ratings

**Table 2 Maximum rating**

| Symbol | Parameter | Value | Unit | Test Conditions | Note |
|---|---|---|---|---|---|

# 2 Electrical characteristics

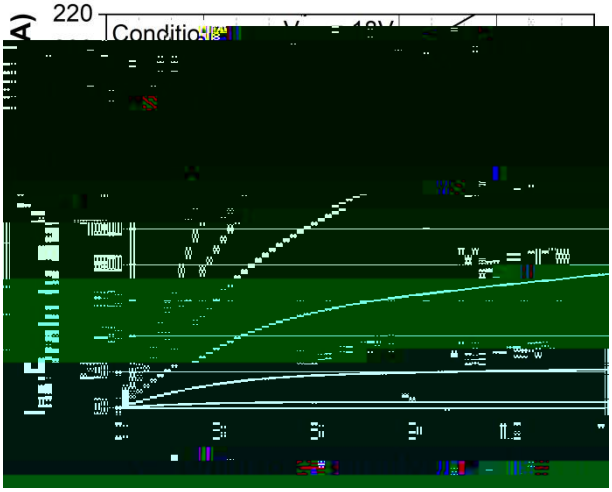
## 2.1 Static characteristics

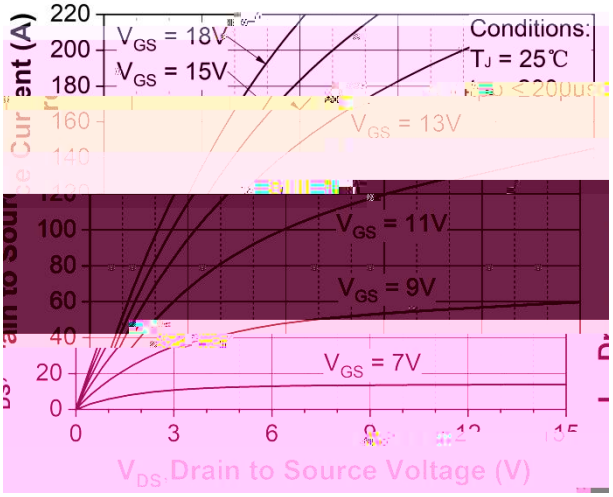
**Table 3 Static characteristics**

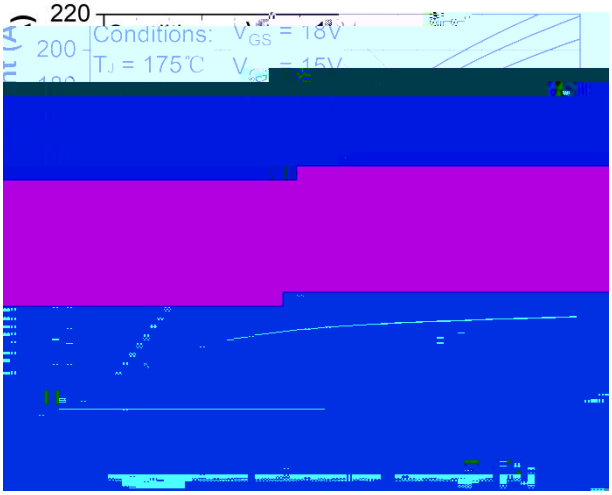
| Symbol | Parameter | Min. | Typ. | Max. | Unit | Test Conditions | Note |
|---|---|---|---|---|---|---|---|

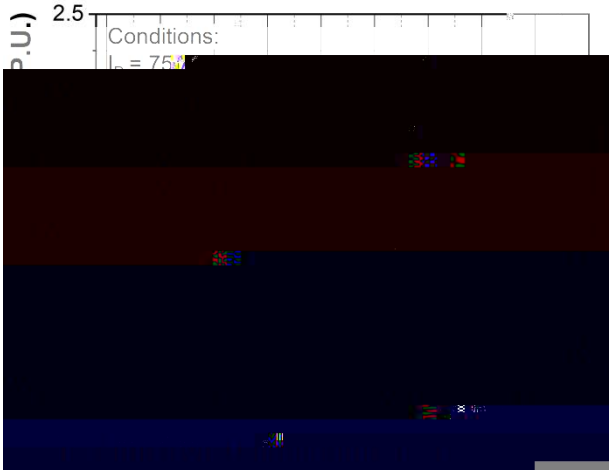
# SG2M020170BJ

## 3 Electrical characteristic diagrams



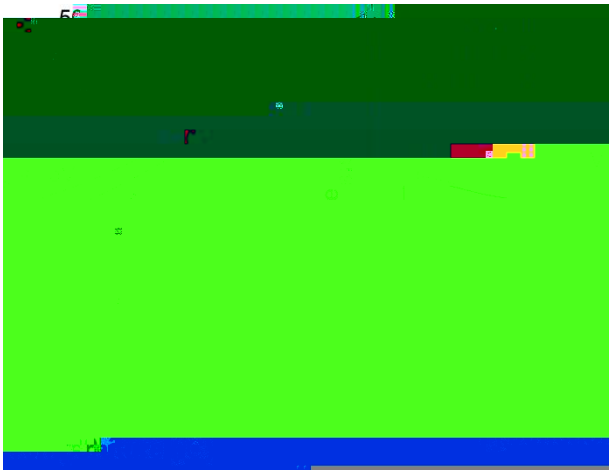



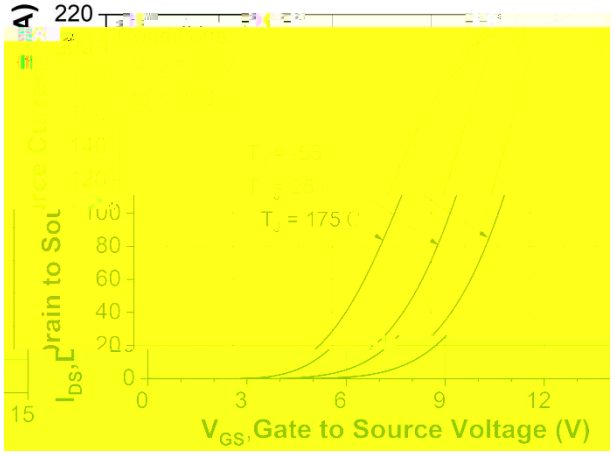



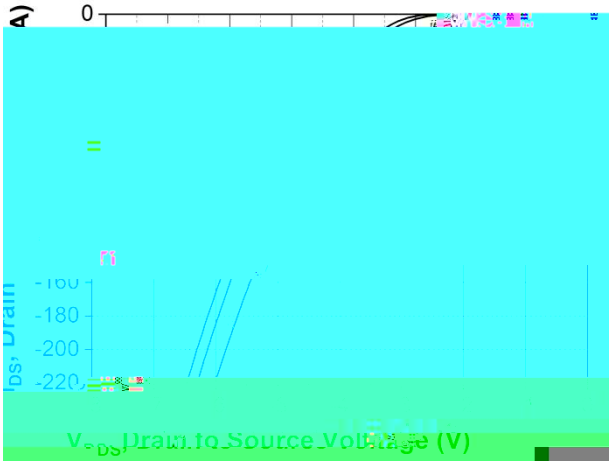


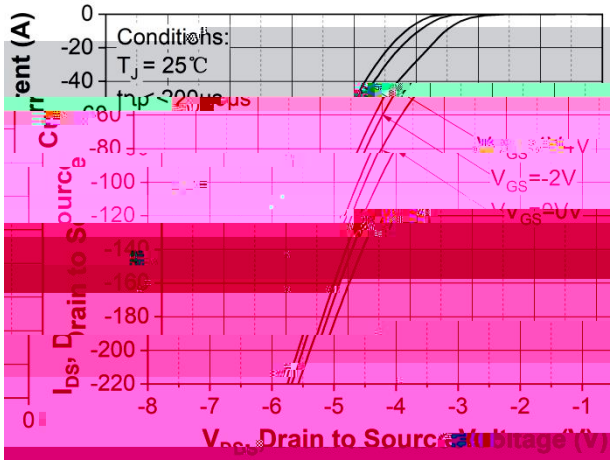


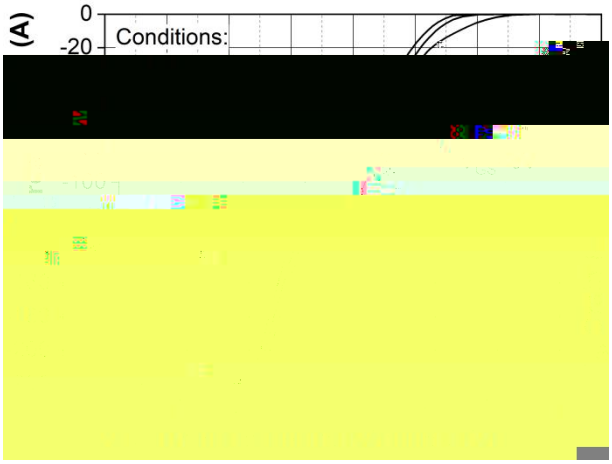


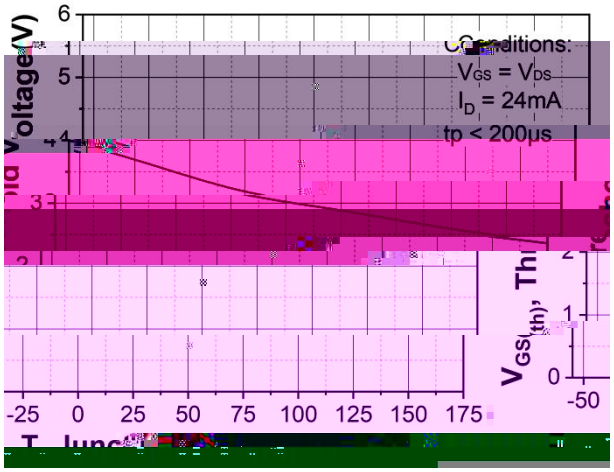
# SG2M020170BJ

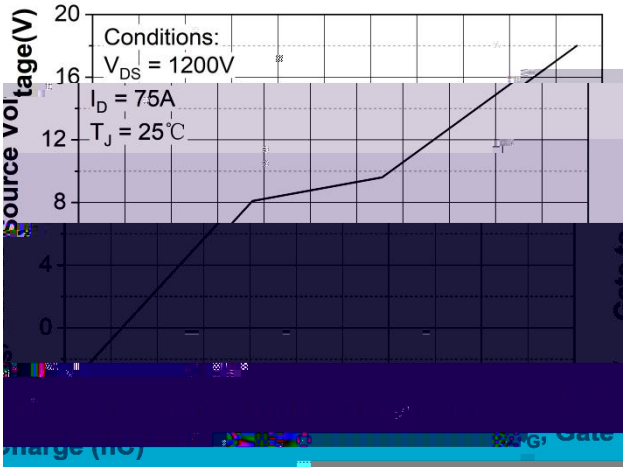


∀0 ∧

# SG2M020170BJ



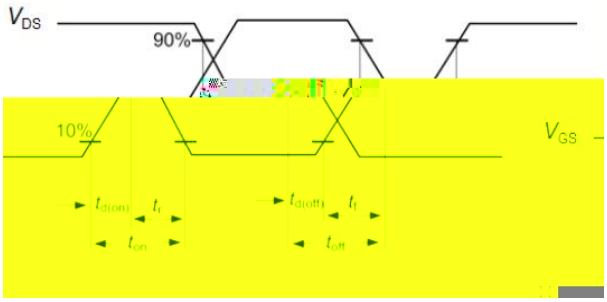
WTSP9 H H

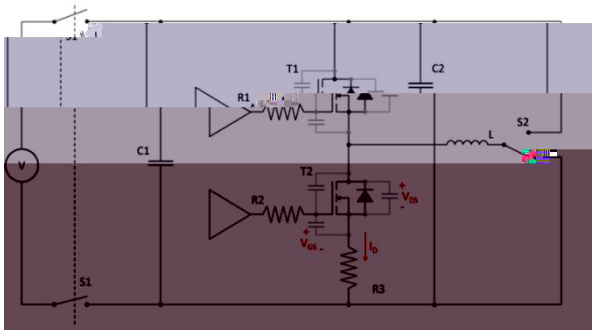
# 4 Mechanical parameters

## 4.1 Dimensions and metallization

| Parameter | Typical value | Unit | Metallization |
|---|---|---|---|

## 5 Test conditions



# SG2M020170BJ

## 1700V SiC Power MOSFET

# Revision history

| Document version | Date of release | Document stage | Description of changes |
|---|---|---|---|
| V01_00 | 2024-03-01 | —— | —— |
| V02_00 | 2024-09-06 | —— | —— |
| V02_01 | 2024-10-25 | —— | —— |
| V02_02 | 2025-04-30 | —— | —— |
| V02_03 | 2025-09-08 | —— | —— |
| V02_04 | 2025-12-30 | Final | —— |

## Attention

**Rohs compliance**

**REACH compliance**

**SG2M020170BJ**