

# BRCM3565ZL

Rev.B Jul.-2024

## / Descriptions

TO-252 P MOS  
P-CHANNEL MOSFET in a TO-252 Plastic Package.

## / Features

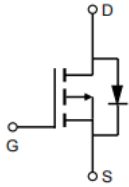
$R_{DS(on)}$   $C_{rss}$   
Low  $R_{DS(on)}$ , low gate charge, low  $C_{rss}$ , fast switching, HF Product.

## / Applications

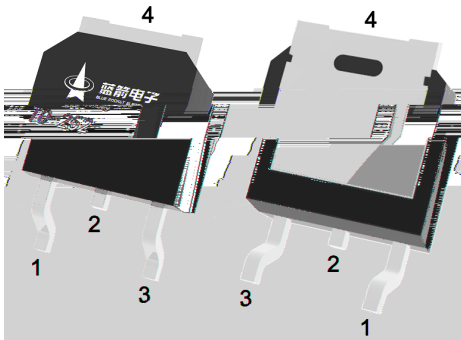
DC/DC

Suited for low voltage applications such as automotive, DC/DC Converters, and high efficiency switching for power management in portable and battery operated products.

## / Equivalent Circuit



## / Pinning



PIN 1 G      PIN 2 D      PIN 3 S      PIN 4 D

## / Marking

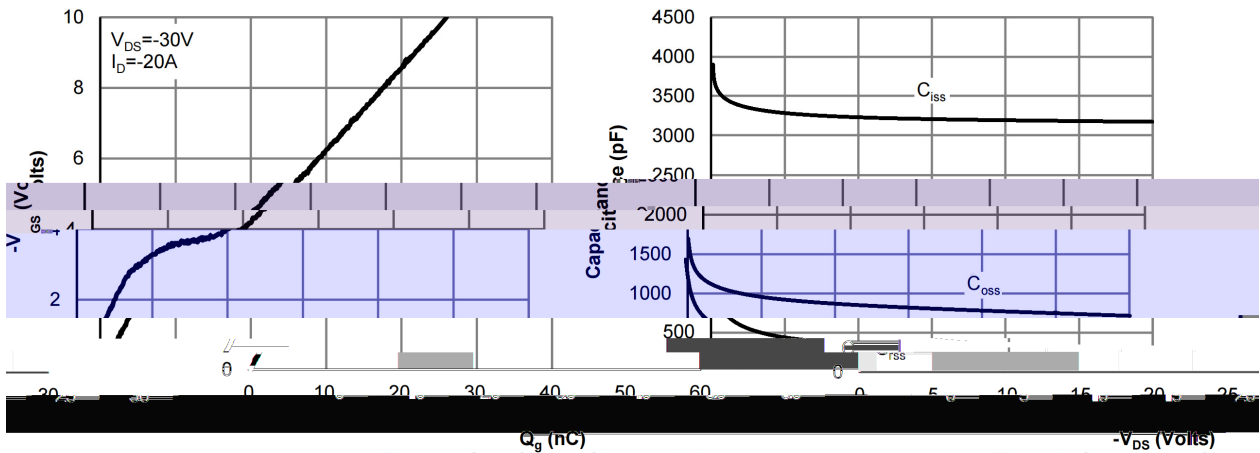
See Marking Instructions.



| Parameter          | Symbol | Test Conditions | Min | Typ | Max | Unit |
|--------------------|--------|-----------------|-----|-----|-----|------|
| Turn-On Delay Time | t      |                 |     |     |     |      |



/ Electrical Characteristic Curve



Gate-Charge Characteristics

Figure 7: Gate-Charge Characteristics

Figure 8: Capacitance Characteristics

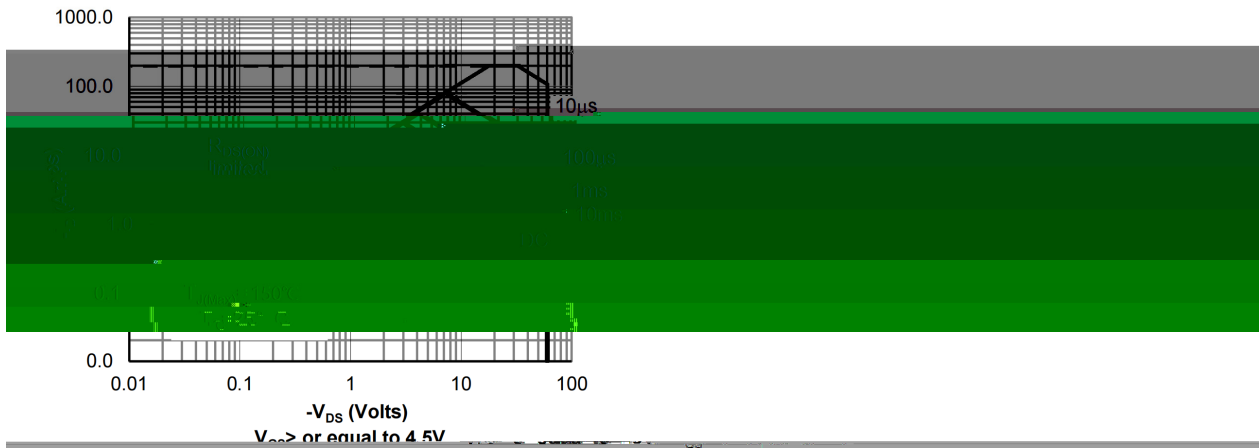
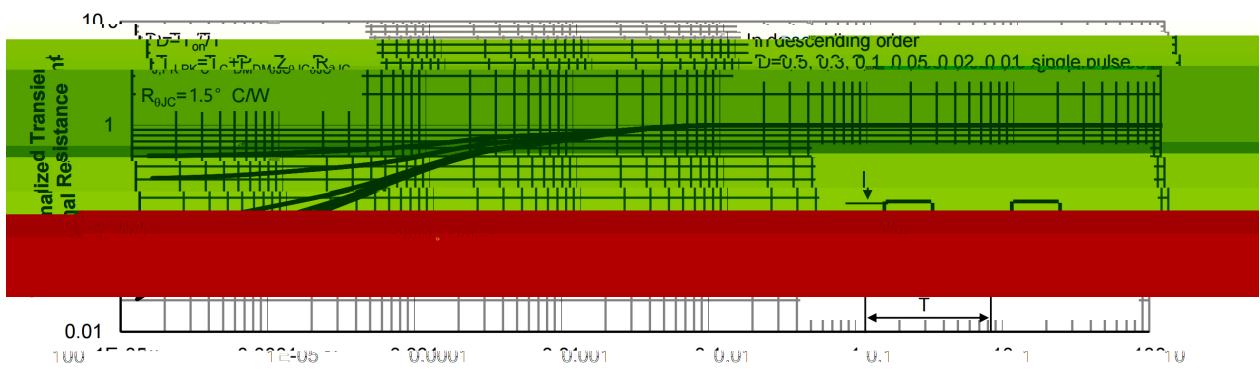


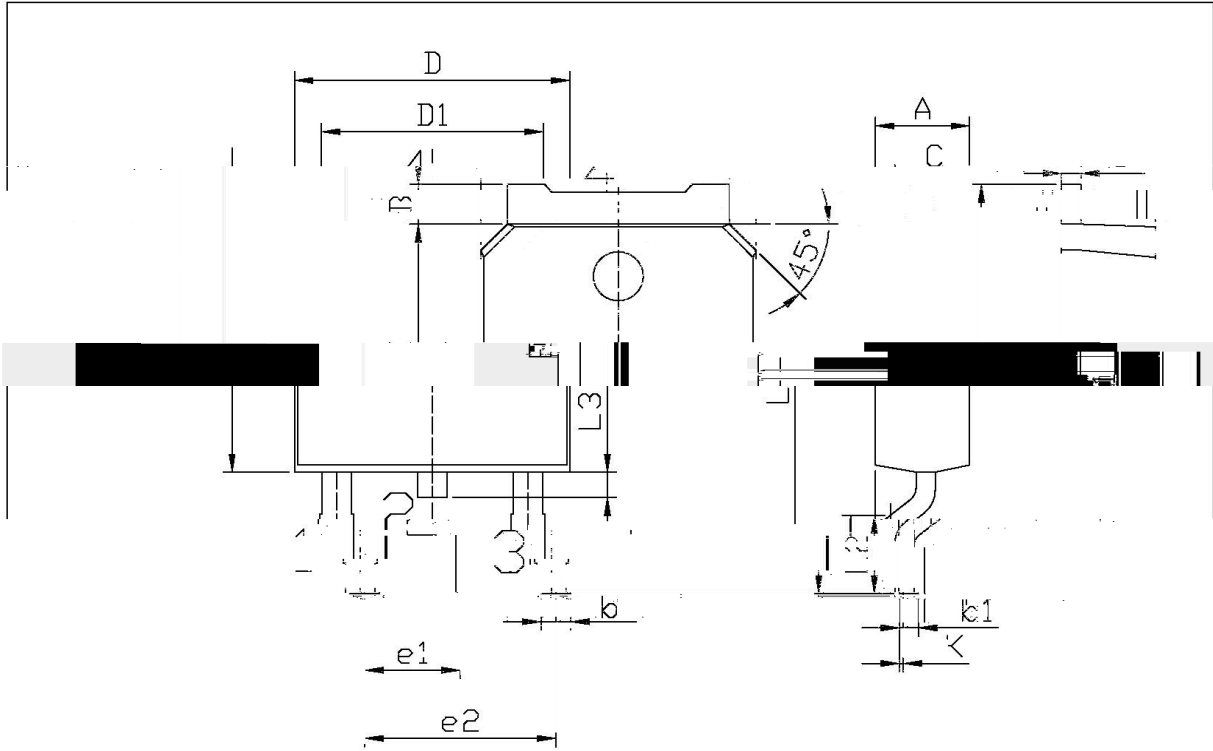
Figure 9: Maximum Forward Biased Safe Operating Area



Maximum Transient Thermal Impedance

Figure 10: Normalized Maximum Transient Thermal Impedance

**/ Package Dimensions**

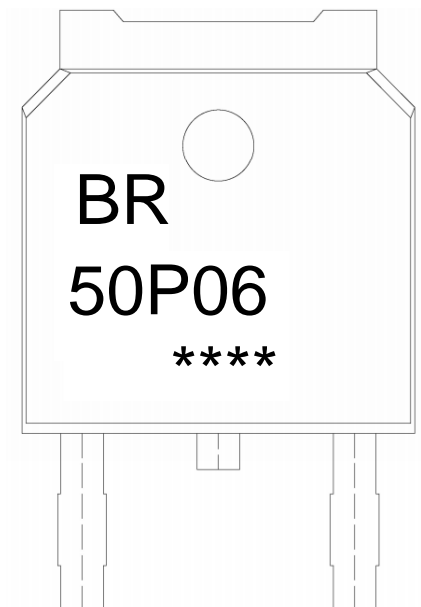


单位: mm

| Symbol | Dimensions In Millimeters |       | Symbol | Dimensions In Millimeters |      |
|--------|---------------------------|-------|--------|---------------------------|------|
|        | Min                       | Max   |        | Min                       | Max  |
| 6.25   | A                         | 2.20  | 2.40   | E                         | 5.95 |
| 2.34   | B                         | 0.95  | 1.25   | e1                        | 2.24 |
| 9.85   | D                         | 10.35 | b1     | 0.45                      | L1   |
| 0.75   | L3                        | 0.60  | 0.90   | D                         | 6.45 |
| 0.80   | K                         | 0.60  | 0.70   | L1                        | 5.10 |

T0-252

**/ Marking Instructions**



BR

50P06

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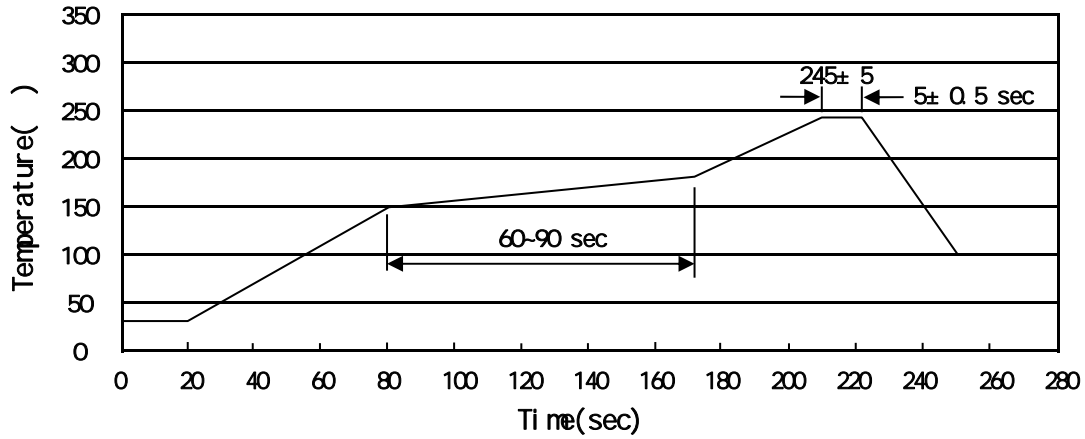
Note:

BR: Company Code

50P06: Product Type Code

\*\*\*\*: Lot No. Code, code change with Lot No.

( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- |   |       |     |       |          |   |
|---|-------|-----|-------|----------|---|
| 1 | 150   | 180 | 60    | 90sec;   | 1.Preheating:150~180 , Time:60~90sec.   |
| 2 | 245±5 |     | 5±0.5 | sec;     | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 |       |     | 2     | 10 /sec. | 3. Cooling Speed: 2~10 /sec.            |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temperature:160±5 Time:10±1 sec

| Package Type | Part No. | Units | Lot Size | Lot No. | Temp          | Time       | Dimension   |
|--------------|----------|-------|----------|---------|---------------|------------|-------------|
| TO-252       | 3565ZL   | 3,600 | 5        | 18,000  | 526x20.5x5.25 | 555x164x50 | 575x290x180 |

/ Notices