

| A | 2021.03.24 | All | AOS-AON6426          |  |  |
|---|------------|-----|----------------------|--|--|
| B | 2021.05.26 | 2   | PK6B2BA ID PD<br>Rth |  |  |
|   |            |     |                      |  |  |
|   |            |     |                      |  |  |
|   |            |     |                      |  |  |
|   |            |     |                      |  |  |
|   |            |     |                      |  |  |
|   |            |     |                      |  |  |
|   |            |     |                      |  |  |
|   |            |     |                      |  |  |
|   |            |     |                      |  |  |

## / Descriptions

PDFN5\*6 N  
N-Channel MOSFET in a PDFN5\*6 Plastic Package .

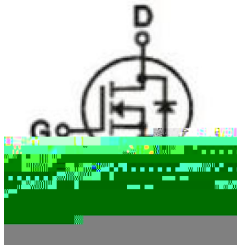
## / Features

Low  $R_{DS(ON)}$  to minimize conductive loss; low Gate Charge for fast switching; Low Thermal resistance.

## / Applications

Battery Management

## / Equivalent Circuit



## / Pinning



PIN1、2、3: S      PIN4: G      PIN5、6、7、8: D

| Pin | 极性 |
|-----|----|
| 1   | S  |
| 2   | S  |
| 3   | S  |
| 4   | G  |
| 5   | D  |
| 6   | D  |
| 7   | D  |
| 8   | D  |

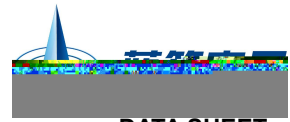
/  $h_{FE}$  Classifications & Marking

。 See Marking Instructions.

| Parameter                              |                     | Symbol                      | Rating     | Unit               |
|----------------------------------------|---------------------|-----------------------------|------------|--------------------|
| Drain-Source Voltage                   |                     | $V_{DS}$                    | 30         | V                  |
| Drain Current - Continuous             |                     | $I_D$                       | 45         | A                  |
| Drain Current – Pulsed                 |                     | $I_{DM}$                    | 135        | A                  |
| Gate-Source Voltage                    |                     | $V_{GS}$                    | $\pm 20$   | V                  |
| Power Dissipation                      |                     | $P_D(T_c=25^\circ\text{C})$ | 28         | W                  |
| Single Pulse Avalanche Energy(L=0.5mH) |                     | $E_{AS}$                    | 211        | mJ                 |
| Avalanche Current(L=0.5mH)             |                     | $I_{AS}$                    | 23         | A                  |
| Junction and Storage Temperature Range |                     | $T_j, T_{stg}$              | -55 to 150 | $^\circ\text{C}$   |
| Thermal resistance, junction - ambient | $t \leq 10\text{s}$ | $R_{\theta JA}$             | 36         | $^\circ\text{C/W}$ |
|                                        | Steady-State        |                             | 64.8       |                    |
| Thermal resistance, junction - case    | Steady-State        | $R_{\theta JC}$             | 4.5        |                    |

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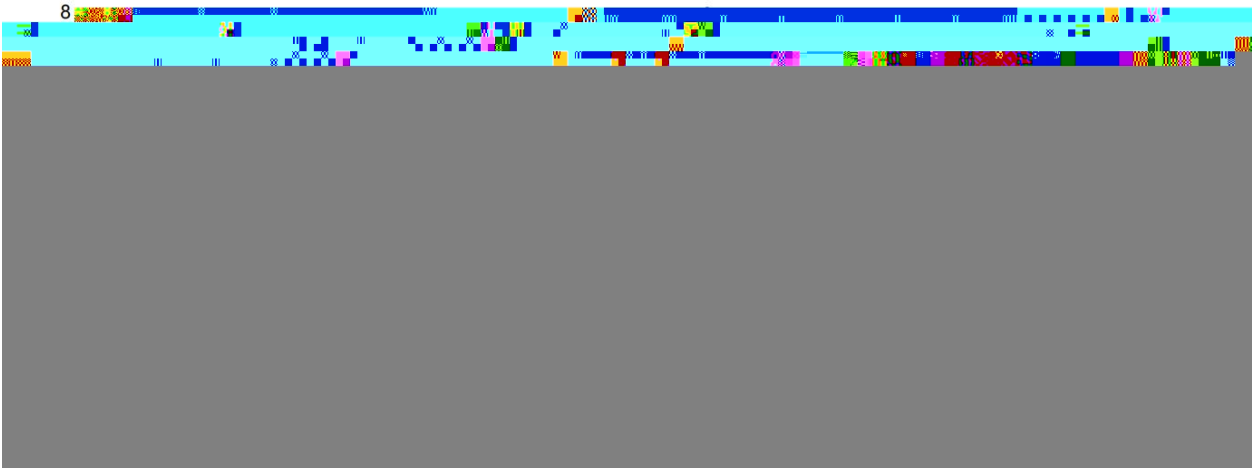
Rev.B May.-2021



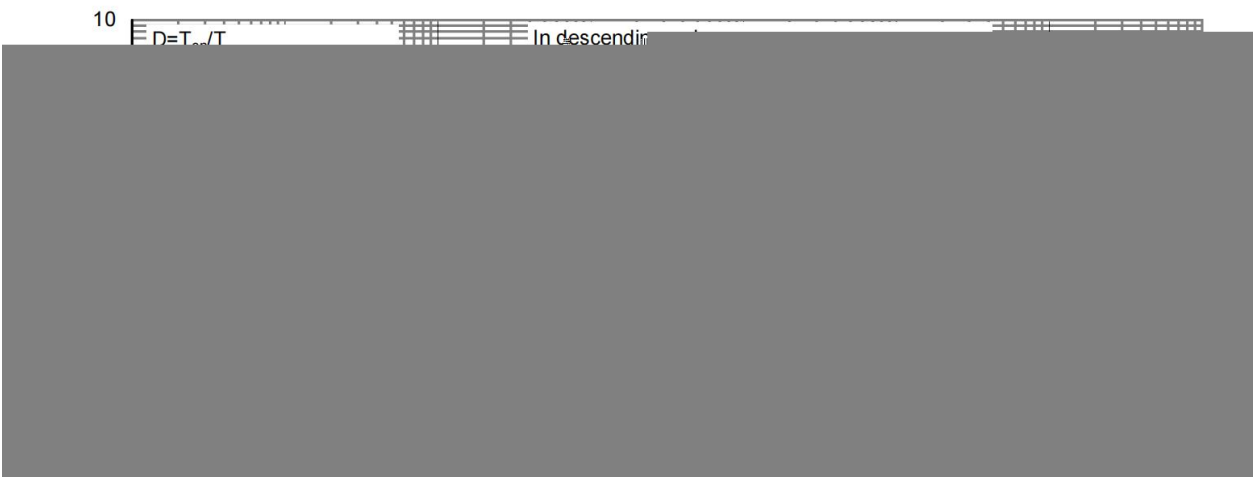
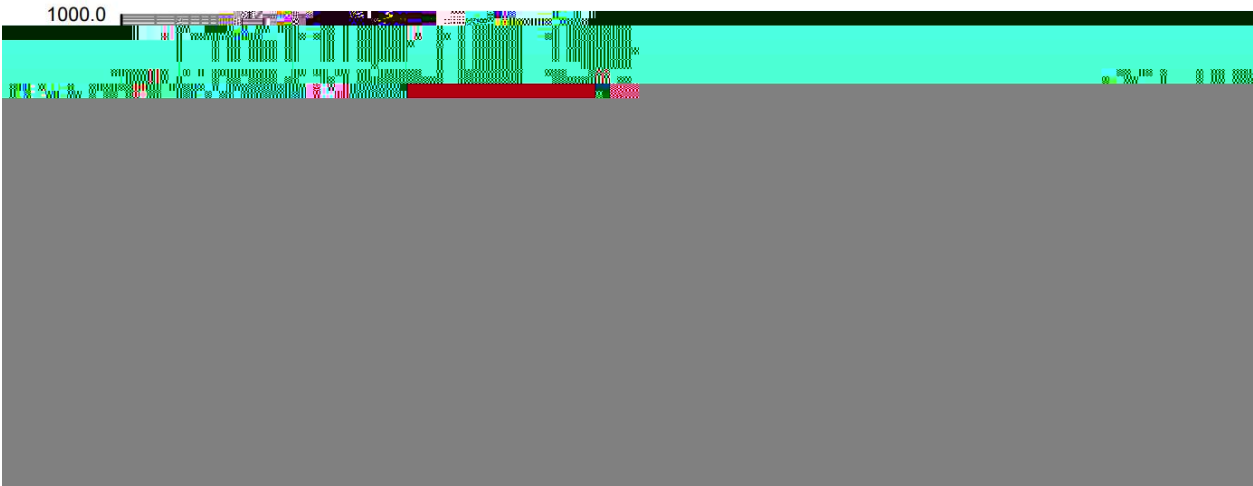
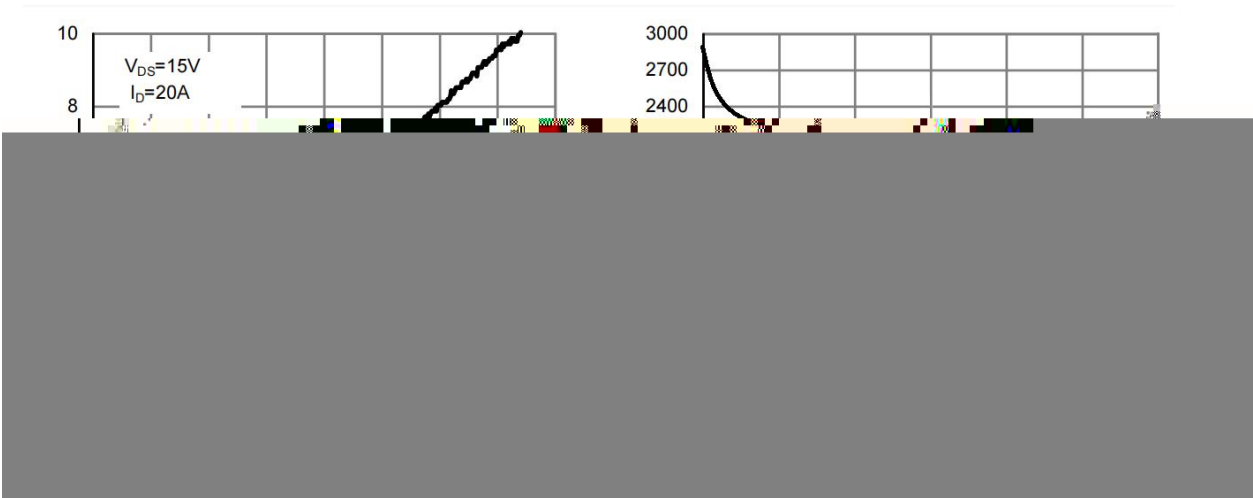
DATA SHEET

| Parameter | Symbol | Test Conditions | Min | Typ |
|-----------|--------|-----------------|-----|-----|
|-----------|--------|-----------------|-----|-----|

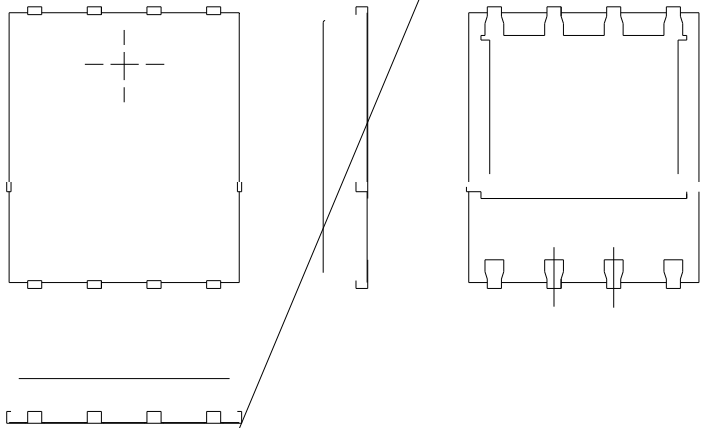
/ **Electrical Characteristic Curve**



/ Electrical Characteristic Curve

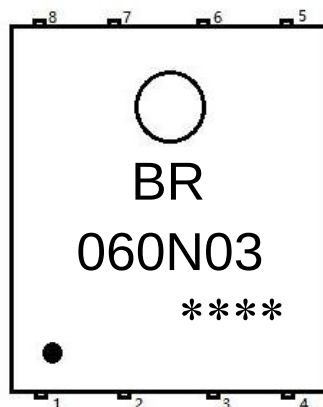


**/ Package Dimensions**



| Dimensions In<br>Millimeterer |      |      |      |
|-------------------------------|------|------|------|
| Symbol                        | MIN  | TYP  | MAX  |
| A                             | 5.90 | 6.00 | 6.10 |
| a                             | 3.91 | 4.01 | 4.11 |
| A2                            | 5.70 | 5.75 | 5.80 |
| B                             | 4.90 | 5.00 | 5.10 |
| b                             | 3.37 | 3.47 | 3.57 |
| B1                            | 4.80 | 4.90 | 5.00 |
| C                             | 0.90 | 0.9  |      |

## / Marking Instructions



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Note

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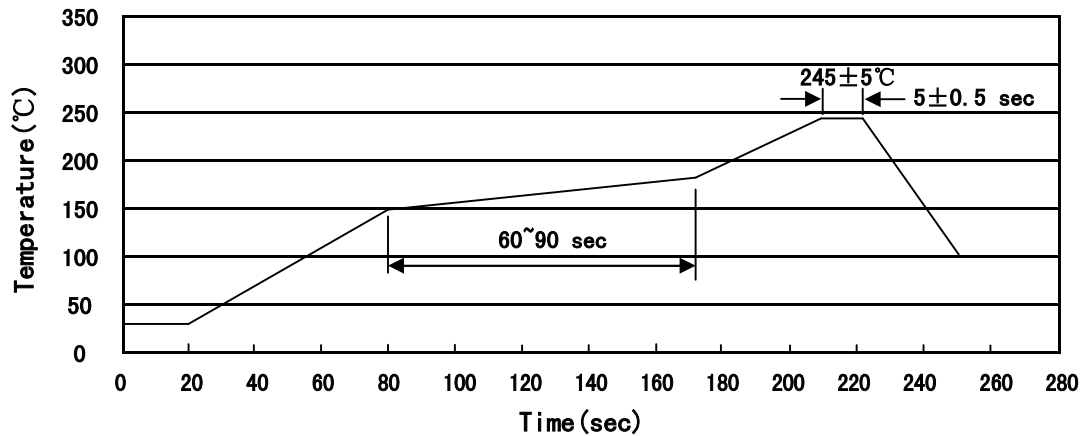
Company Code

060N03

Product Type.



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



Note:

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

## / Resistance to Soldering Heat Test Conditions

260±5°C

10±1 sec.

Temp.:260±5°C

Time:10±1 sec

## / Packaging SPEC.

/ REEL

| Package Type<br>封装形式 | Units 包装数量 |      |       |     |       | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |            |             |
|----------------------|------------|------|-------|-----|-------|-----------------------------------------|------------|-------------|
|                      | 只/卷盘       | 卷盘/盒 | 只/盒   | 盒/箱 | 只/箱   |                                         | 盒          | 箱           |
| PDFN5*6              | 5000       | 2    | 10000 | 6   | 60000 | 13"×12                                  | 360×360×50 | 380×335×366 |

## / Notices