

PDFN3×3A-8L P MOS

P-Channel Enhancement Mode Field Effect Transistor in a PDFN3 3A-8L Plastic Package.

$V_{DS} (V) = -30V$

$I_D = -34 A (V_{GS} = 20V)$

$R_{DS(ON)}@10V \ 14mR(Typ.12.8mR)$

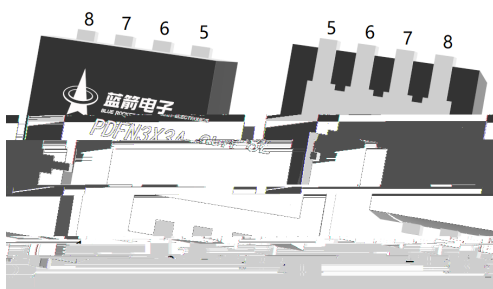
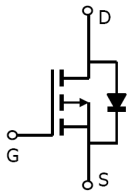
AEC-Q101

Qualified to AEC-Q101 Standards for High Reliability,

HF Product.

### DC/DC

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies, Meet the stringent requirements of automotive applications.

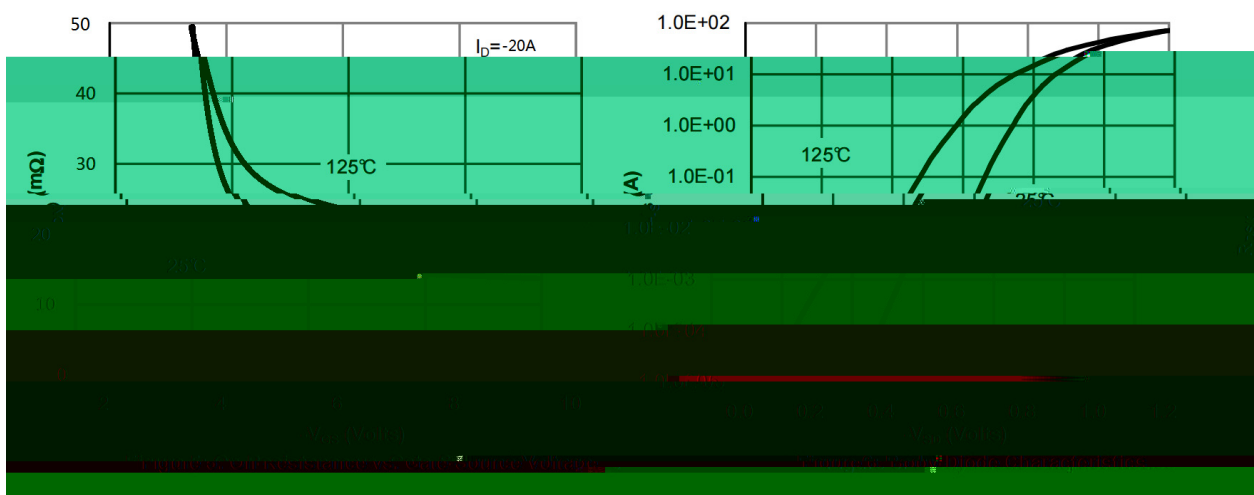
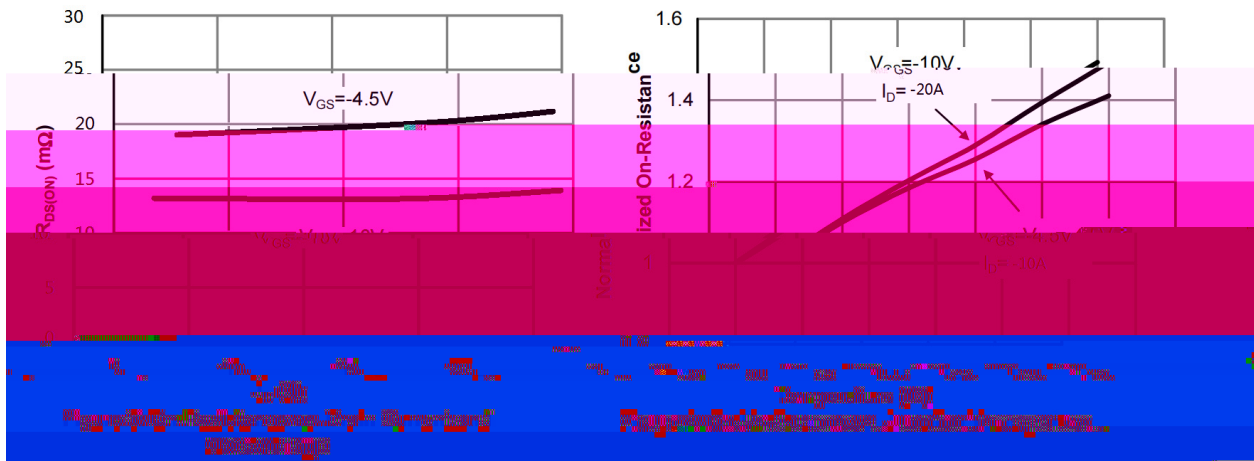
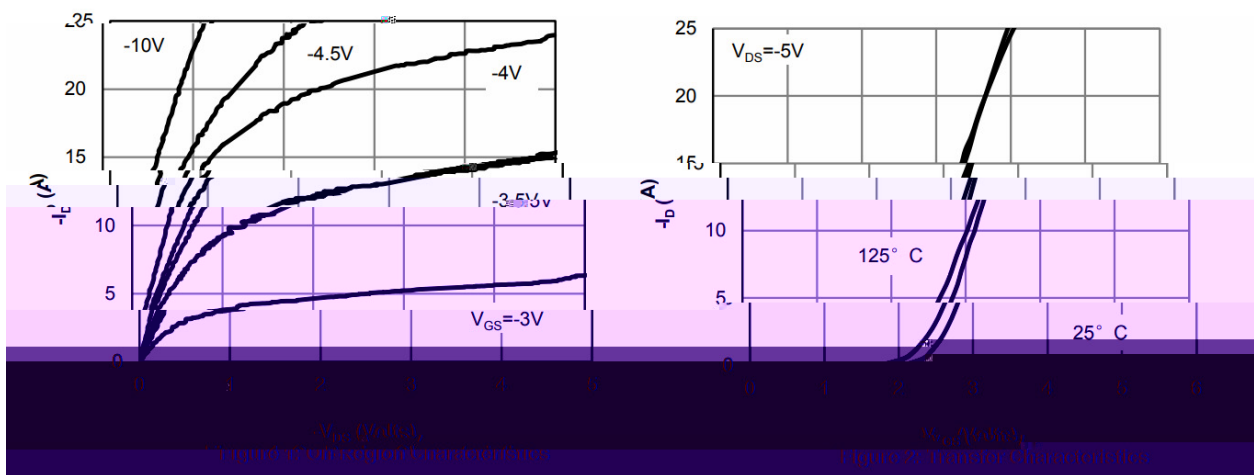


| 出脚   | 定义 |
|------|----|
| Pin1 | S  |
| Pin2 | S  |
| Pin3 | S  |
| Pin4 | G  |
| Pin5 | D  |
| Pin6 | D  |
| Pin7 | D  |
| Pin8 | D  |

See Marking Instructions.

| Parameter                               |              | Symbol                      | Rating     | Unit |
|-----------------------------------------|--------------|-----------------------------|------------|------|
| Drain-Source Voltage                    |              | $V_{DS}$                    | -30        | V    |
| Drain Current                           |              | $I_D(T_C=25^\circ\text{C})$ | -34        | A    |
| Drain Current - Pulsed                  |              | $I_{DM}$                    | -80        | A    |
| Gate-Source Voltage                     |              | $V_{GS}$                    | 20         | V    |
| Single Pulsed Avalanche Energy          |              | $E_{AS}$                    | 210        | mJ   |
| Avalanche Current                       |              | $I_{AS}$                    | -20        | A    |
| Power Dissipation                       |              | $P_D(T_C=25^\circ\text{C})$ | 29         | W    |
| Operating and Storage Temperature Range |              | $T_J, T_{stg}$              | -55 to 150 |      |
| Junction-to-Ambient                     | $t \leq 10$  | $R_{\theta JA}$             | 40         | /W   |
| Junction-to-Ambient                     | Steady-State |                             | 75         |      |
| Junction-to-Case                        | Steady-State | $R_{\theta JC}$             | 4.2        |      |

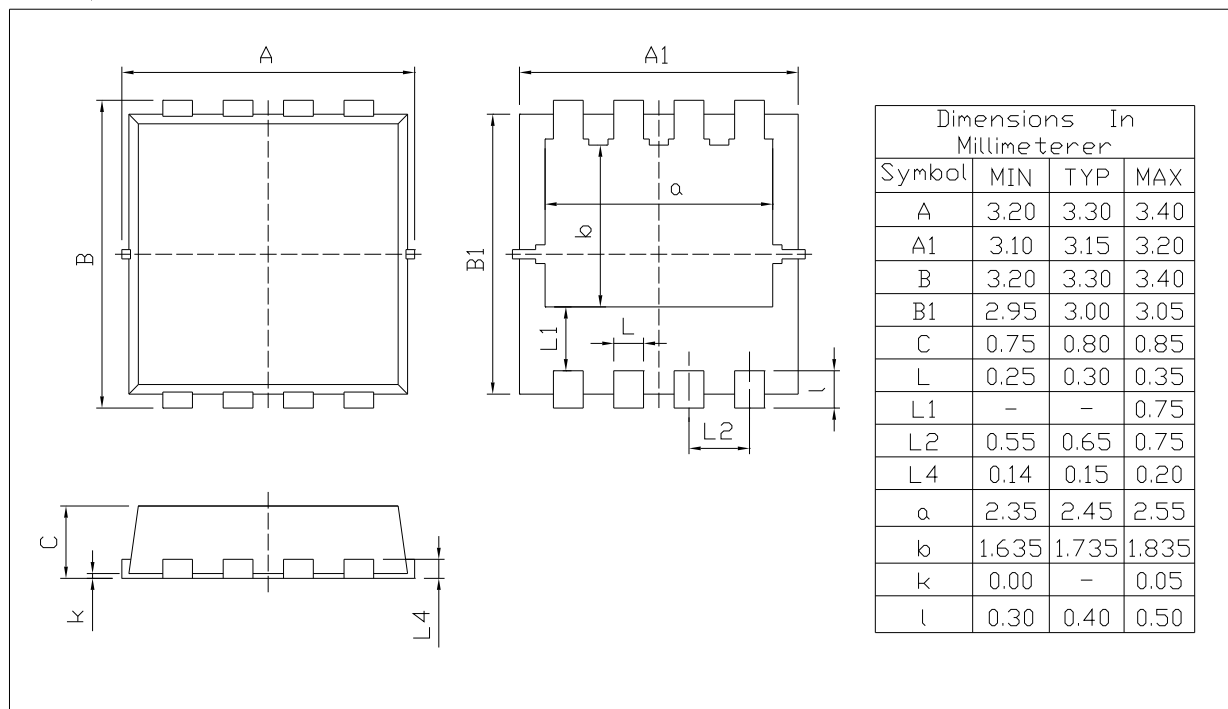
| Parameter                       | Symbol     | Test Conditions                 | Min | Typ | Max | Unit |
|---------------------------------|------------|---------------------------------|-----|-----|-----|------|
| Drain-Source Breakdown Voltage  | $BV_{DSS}$ | $I_D = -250\mu A$ $V_{GS} = 0V$ | -30 |     |     | V    |
| Zero Gate Voltage Drain Current | $I_{DSS}$  | $V_{DS} = -30V$                 |     |     |     |      |



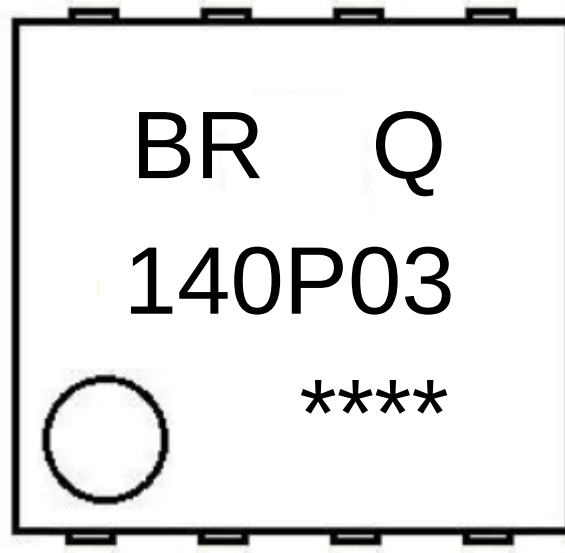


PDFN3X3A-8L

Unit:mm



Rev.00 202011



BR

Q

140P03

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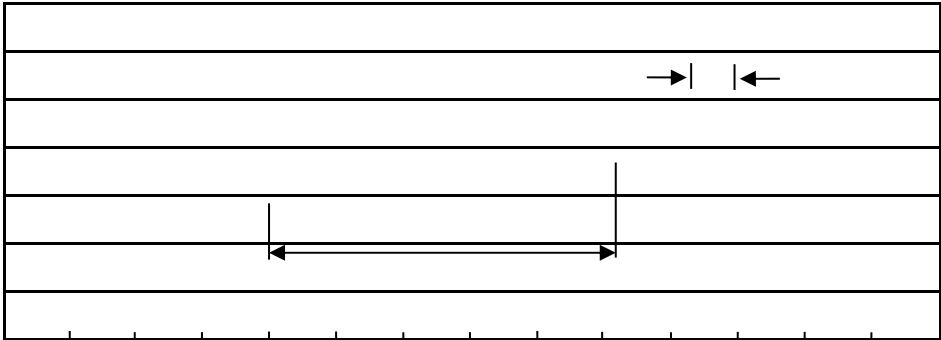
Note:

BR: Company Code

Q: Automobile halogen-free product Code

140P03: Product Type Code

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

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

Note:

- |   |       |     |           |                                         |                                        |
|---|-------|-----|-----------|-----------------------------------------|----------------------------------------|
| 1 | 150   | 200 | 60        | 120sec;                                 | 1.Preheating:150~200 , Time:60~120sec. |
| 2 | 255±5 |     | 5±0.5sec; | 2.Peak Temp.:255±5 , Duration:5±0.5sec. |                                        |
| 3 |       | 2   | 10 /sec.  | 3. Cooling Speed: 2~10 /sec.            |                                        |

|       |           |             |               |
|-------|-----------|-------------|---------------|
| 260±5 | 10±1 sec. | Temp.:260±5 | Time:10±1 sec |
|-------|-----------|-------------|---------------|

/ REEL

| Package Type | Units      |                 |                 |                       |                 | Dimension |            |           | (unit mm <sup>3</sup> ) |
|--------------|------------|-----------------|-----------------|-----------------------|-----------------|-----------|------------|-----------|-------------------------|
|              | Units/Reel | Reels/Inner Box | Units/Inner Box | Inner Boxes/Outer Box | Units/Outer Box | Reel      | Inner Box  | Outer Box |                         |
| PDFN3×3A-8L  | 5,000      | 2               | 10,000          | 6                     | 60,000          | 13 ×12    | 3350 380×3 | 35×36     |                         |