## SGIQ6Ö6D0;0 ṂṂÞ S ॐ PRV ʃ ѽ Ẓ ৭

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

## ৭ ৭ ৭

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

$I_D$ =-34 A ($V_{GS}$ = ±20V)

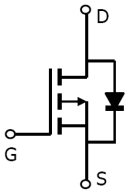
$R_{DS(ON)}$@10V ≤ 14mR(Typ.12.8mR)

৭ ᵀ DHF0T434 ‰´ ৯ ˡ ˎ ό ɭ ∂ ı ή ғ β Qualified to AEC-Q101 Standards for High Reliability, HF Product.

## ₹ ৯ ı ' GF2GF ₾ Ω ⁼ ı ' Â Ʉ ı ◗ ′ ∩ ₾ Ẓ ŧ ⅭⅭ ɭ ∂

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

## ৭ ৭ ৭

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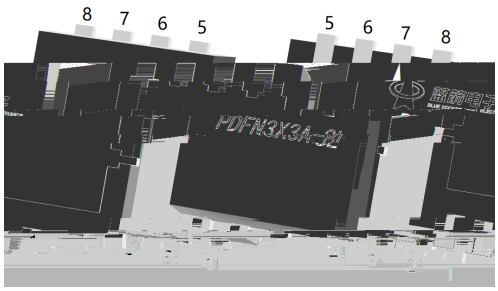


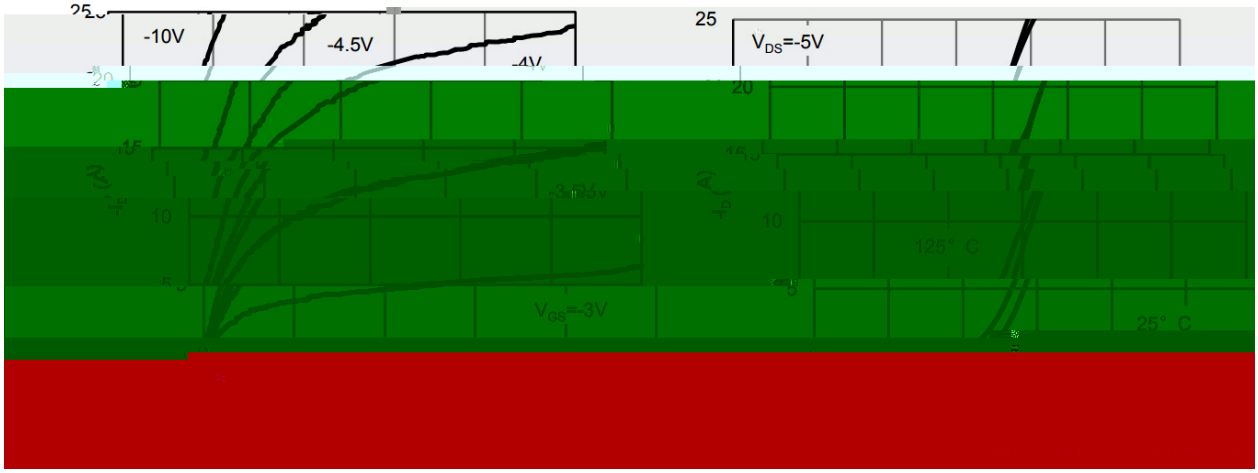

| 出脚 | 定义 |
|---|---|
| Pin1 | S |
| Pin2 | S |

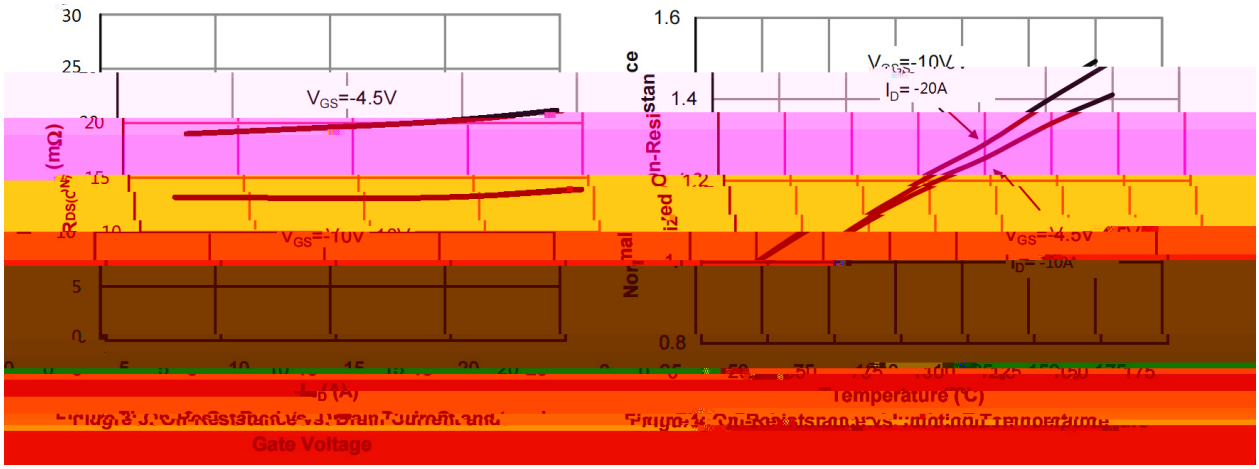
## ð ᴍ ৭ ب ˝

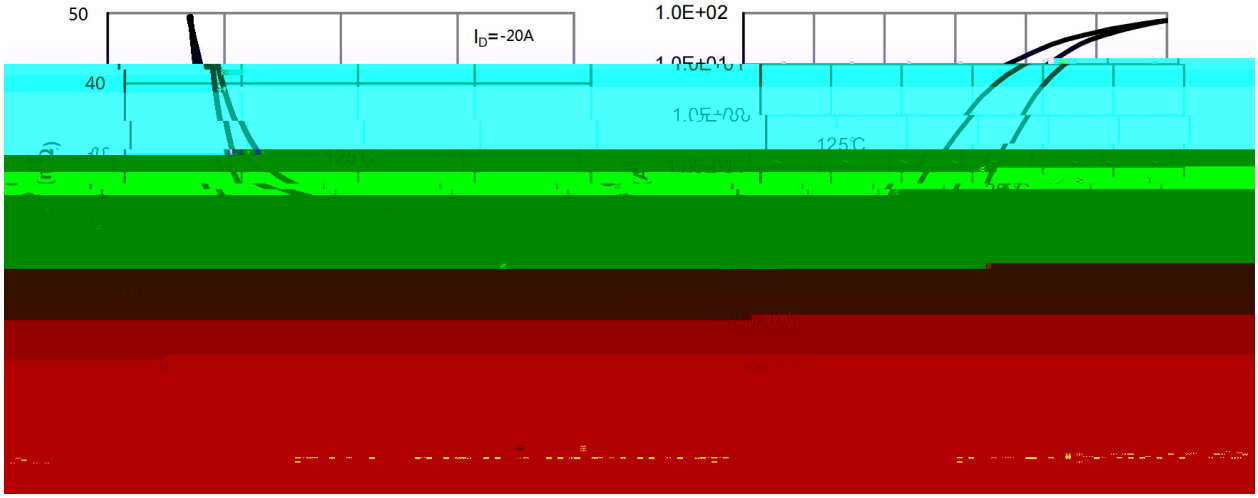
See Marking Instructions.

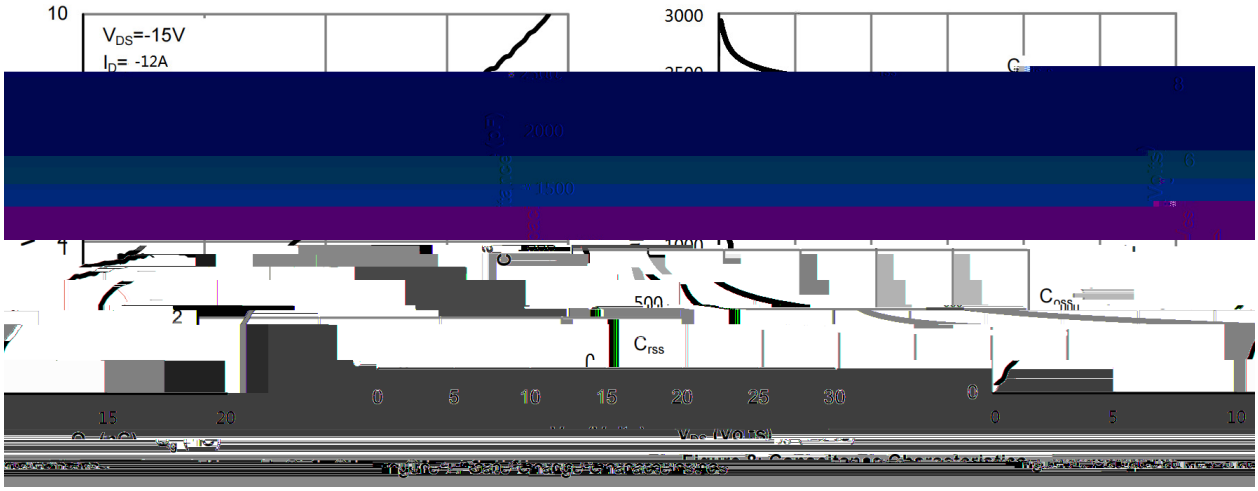
| v ″Ω<br>Parameter | | ϒ N<br>Symbol | ″Ω Ö<br>Rating | D Ч<br>Unit |
|---|---|---|---|---|
| Drain-Source Voltage | | $V_{DSS}$ | -30 | V |
| Drain Current | | $I_D$(Tc=25 ) | -34 | A |
| Drain Current - Pulsed | | $I_{DM}$ | -80 | A |
| Gate-Source Voltage | | $V_{GS}$ | ± 20 | V |
| Single Pulsed Avalanche Energy | | $E_{AS}$ | 210 | mJ |
| Avalanche Current | | $I_{AS}$ | -20 | A |
| Power Dissipation | | $P_D$(Tc=25 ) | 29 | W |
| Operating and Storage Temperature Range | | $T_J$,$T_{stg}$ | -55 to 150 | |
| Junction-to-Ambient | t ≤ 10 | R JA | 40 | /W |
| Junction-to-Ambient | Steady-State | | 75 | |
| Junction-to-Case | Steady-State | R JC | 4.2 | |

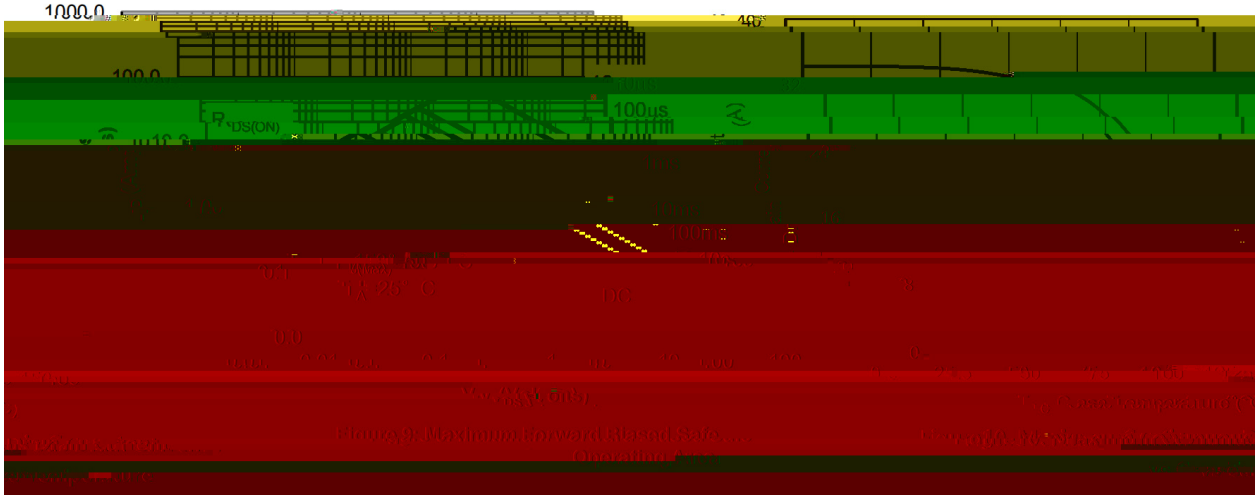
| v ¨Ω<br>Parameter | ϒ N<br>Symbol | ╜ ;ˆ ţ<br>Test Conditions | ѡ ŋ Ө<br>Min | Ɛ ʒ Ө<br>Typ | ѡ ² Ө<br>Max | D Ӈ<br>Unit |
|---|---|---|---|---|---|---|
| Drain-Source Breakdown Voltage | $BV_{DSS}$ | $I_D$=-250 A $V_{GS}$=0V | -30 | | | V |
| Zero Gate Voltage Drain Current | $I_{DSS}$ | $V_{DS}$=-30V | | | | |

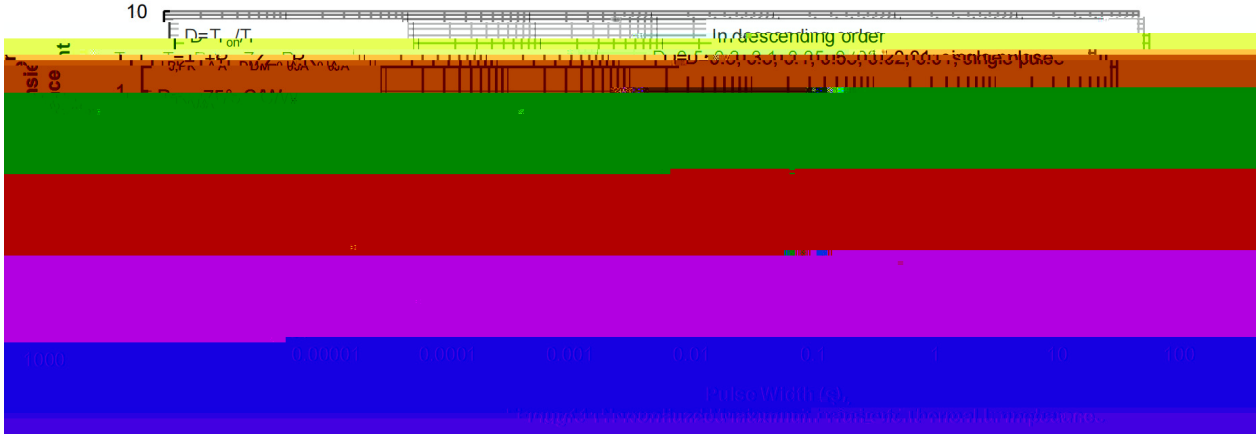

-10V
-4.5V
-4V
-3.5V
-3V
$V_{GS}$=-3V
125° C
25° C
$V_{DS}$=-5V


$V_{GS}$=-4.5V
$V_{GS}$=-10V
$I_D$= -20A
$V_{GS}$=-4.5V
$I_D$= -10A
Gate Voltage
Temperature (°C)


$I_D$=-20A
125℃

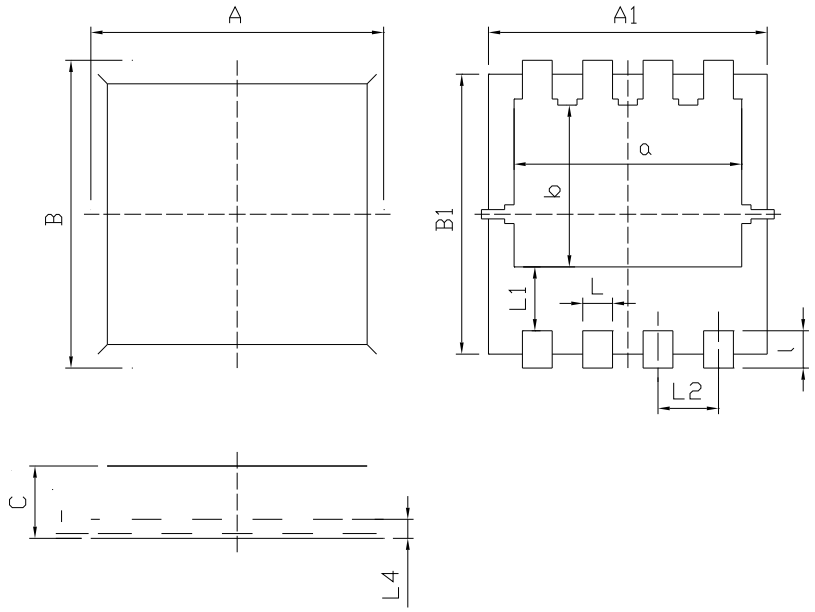

10
$V_{DS}$=-15V
$I_D$= -12A
3000
2000
1500
1000
500
0
$C_{rss}$
$C_{oss}$
0
5
10
15
20
25
30
0
5
10
15
20


1000.0
100.0
$R_{DS(ON)}$
100μs
DC


10
In descending order

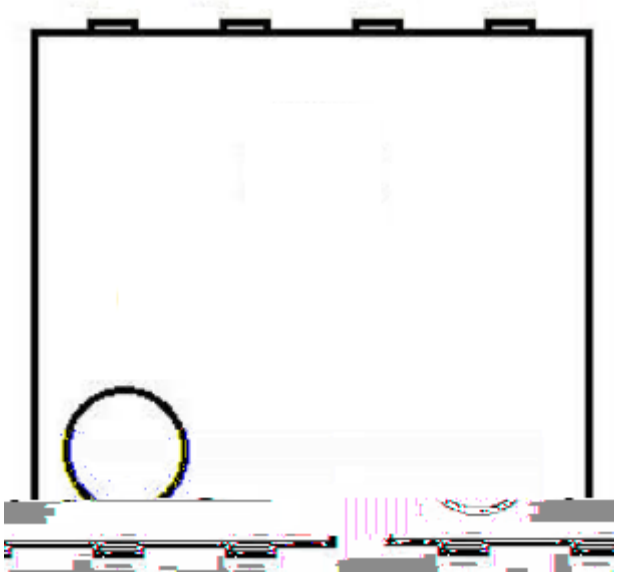
PDFN3X3A-8L

Unit:mm




| Dimensions In Millimeterer | | | |
|---|---|---|---|
| Symbol | MIN | TYP | MAX |
| A | 3.20 | 3.30 | 3.40 |
| A1 | 3.10 | 3.15 | 3.20 |
| B | 3.20 | 3.30 | 3.40 |
| B1 | 2.95 | 3.00 | 3.05 |
| C | 0.75 | 0.80 | 0.85 |
| L | 0.25 | 0.30 | 0.35 |
| L1 | - | - | 0.75 |
| L2 | 0.55 | 0.65 | 0.75 |
| L4 | 0.14 | 0.15 | 0.20 |
| a | 2.35 | 2.45 | 2.55 |
| b | 1.635 | 1.735 | 1.835 |
| k | 0.00 | - | 0.05 |
| l | 0.30 | 0.40 | 0.50 |

Rev.00 202011



ᵕ ˝ χ

| | |
|---|---|
| BR χ | ᵻᵡ ϛ ᴎ Ꮁ |
| Q χ | ᵻᵡ ∩ ᶜ ᵑ̀ ᶠ ᵝ ‰ ᵛ́ |
| 140P03 χ | ᵻᵡ ʒ ᴺ Ꮁ |
| ---- χ | ᵻᵡ ᵻ ᶠ ᵑ̋ ᴺ Ꮁ ᵻ ᵩ ᵻ ᶠ ᵑ̋ ᴺ Ψ ᖘ |

Note:

BR:

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

ب ˝ χ

1 Ĺ ♬ □ ỷ 150 Ḱ 200 ɬ ı `H ڑ 60 Ḱ 120sec;

2 Š Ë □ ỷ 255 ° 5 ɬ ı `H ڑ 'Y ʌ ʬ 5 ° 0.5sec;

3 ì ˙ ϒ ˛ ɔ ๛ ỷ ʬ 2 Ḱ 10 ɬ /sec.

Note:

1.Preheating:150~200 ɬ , Time:60~120sec.

2.Peak Temp.:255 ° 5 ɬ , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ɬ /sec.

□ ỷ χ 260 ° 5 ɬ `H ڑ χ 10 ° 1 sec. Temp.:260±5 Time:10±1 sec

ɔ ` ɣ Ł / REEL

| Package Type | Units | | | | | Dimension | | (unit mm³) |
|---|---|---|---|---|---|---|---|---|
| | Units/Reel / | Reels/Inner Box / | Units/Inner Box / | Inner Boxes/Outer Box / | Units/Outer Box / | Reel | Inner Box | Outer Box |