## / Descriptions

N ঌ TO-220 ḾḾ Ꝉ ʃ ѽ Ẓ ㄱ

N-Channel MOSFET in a TO-220 Plastic Package.

## / Features

$V_{DS}$=200V ψ $I_D$=18A ψ $V_{GS}$=±20V

$R_{DS(on)}$@10V≤170mΩ(Type.115mΩ)

$R_{DS(on)}$@6V≤200mΩ(Type.130mΩ)

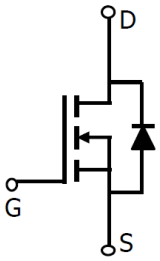
ḭ ғ β HF Product.

## / Applications

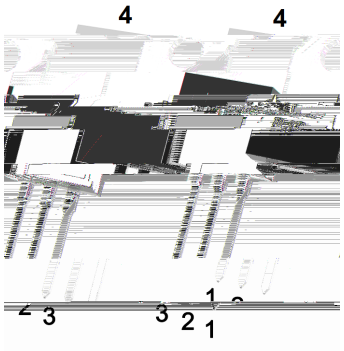
ㅅ ㅀ ق ڈ Ầ ԋ 0HG Ẓ ғ

Networking,Load Switch,LED applications.

## / Equivalent Circuit




## / Pinning




PIN1 χ G PIN 2 4 χ D PIN 3 χ S

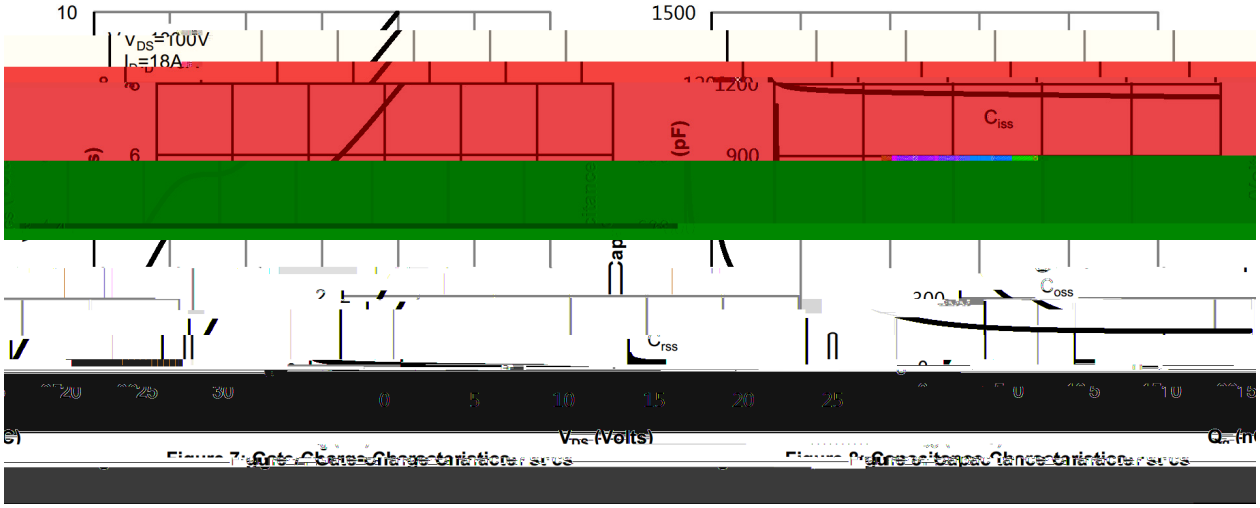
## / Marking

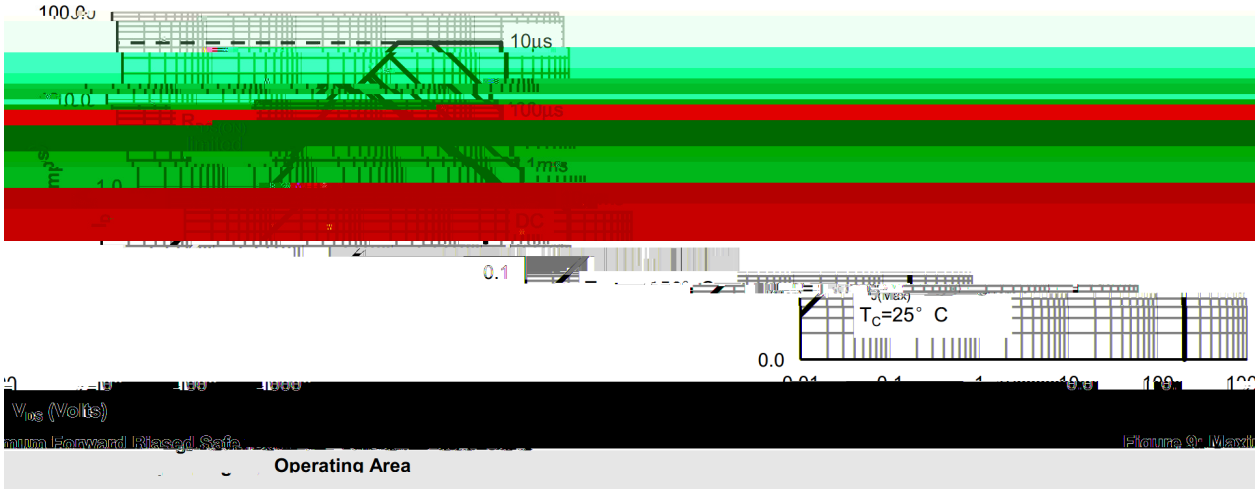
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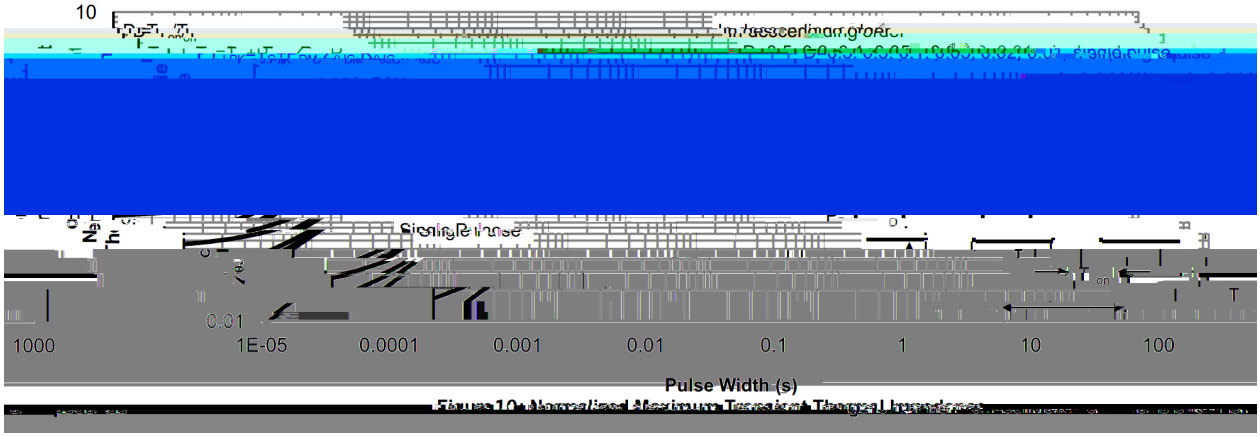
See Marking Instructions.

| v ̈Ω<br>Parameter | ϒ N<br>Symbol | ⅄ ;ǂ ʇ<br>Test Conditions | ѡ ṇ Ө<br>Min | Ɛ ʒ Ө<br>Typ | ѡ ᶻ Ө<br>Max | ᗡ Ꮒ<br>Unit |
|---|---|---|---|---|---|---|
| Turn-On Delay Time | $t_{d(on)}$ | | | 11.7 | | |
| Turn-On Rise Time | $t_r$ | $V_{GS}$=10V $V_{DS}$=75V<br>$R_{GEN}$=3Ϝ | | 3.5 | | ns |

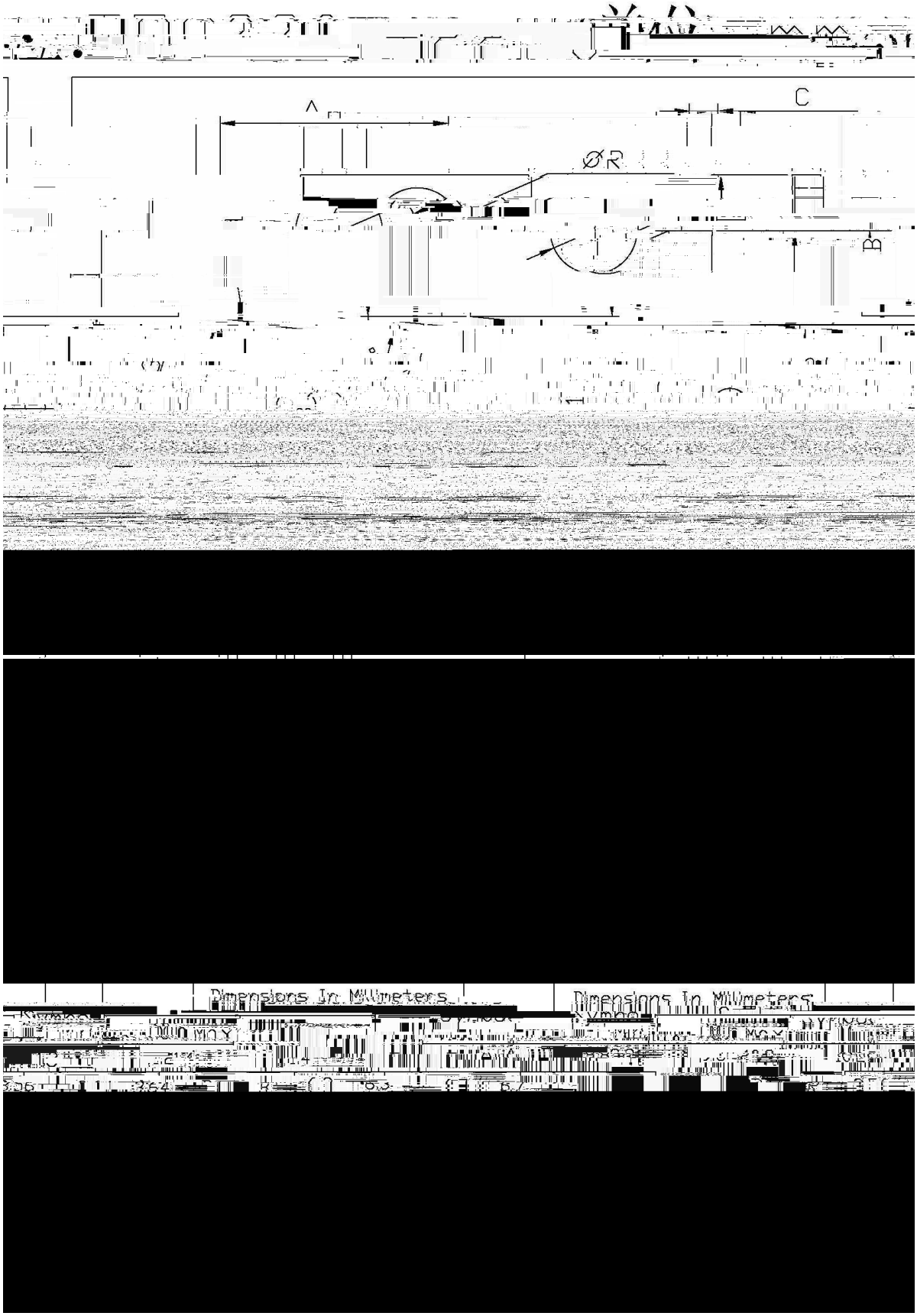
## / Electrical Characteristic Curve



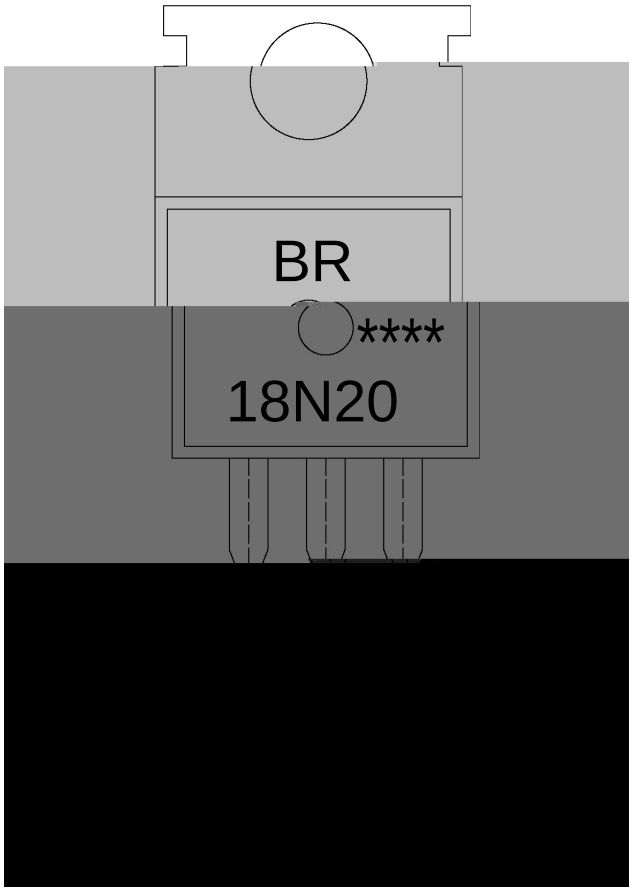



## / Package Dimensions



## / Marking Instructions

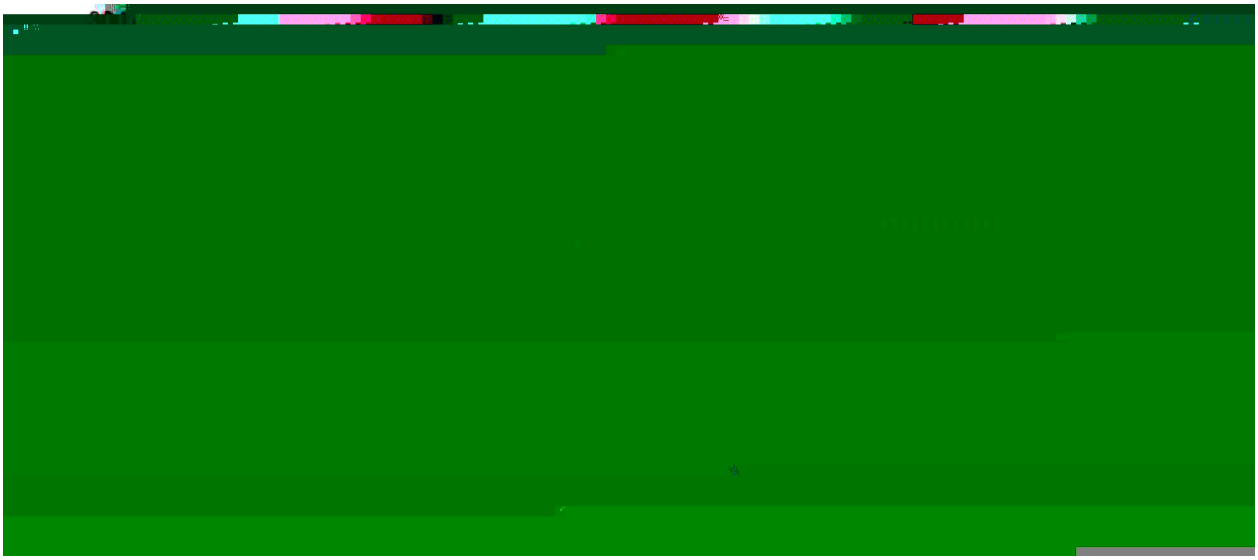



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|---|---|
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| EU χ | ѭ ϛ ᴎ Ղ ϧ |
| 4 ; Q53 χ | ѭ ʒ ᴺ Ղ ϧ |
| ---- χ | ѭ ı ғ ӈ̈ ᴺ Ղ ϧ ı ₺ ı ғ ӈ̈ ᴺ Ψ ק |

Note:

| | |
|---|---|
| BR: | Company Code |
| 18N20: | Product Type |
| ****: | Lot No. Code, code change with Lot No. |

## ( ) / Temperature Profile for Dip Soldering(Pb-Free)



ب ˝ χ

1 Ĺ ♬ □ ỷ 25 Ḱ 150 ł ı `H ڑ 60 Ḱ 90sec;

2 Š Ө □ ỷ 255 ° 5 ł ı `H ڑ `Y ﾊ ㎛ 5 ° 0.5sec;

3 ì ˙ ﾘ ˛ ɔ ﻉ ỷ ㎛ 2 Ḱ 10 ł /sec.

Note:

1.Preheating:25~150 ł , Time:60~90sec.

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

3. Cooling Speed: 2~10 ł /sec.

## / Resistance to Soldering Heat Test Conditions

| | | | |
|---|---|---|---|
| □ ỷ χ 270 ° 5 ł | `H ڑ χ 10 ° 1 sec. | Temp.:270±5 | Time:10±1 sec |

## / Packaging SPEC.

`Ω ţ ﾘ Ł / BULK