

**5 Ø / Descriptions**

TO-252 .> // x N ?æ 3MOS « | o  
 N-CHANNEL MOSFET in a TO-252 Plastic Package.

**/“ / Features**

$V_{DS}=60V$  ;  $I_D=20A$

$R_{DS(on)}@10V$  37m (Type.25m )

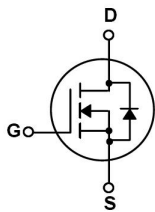
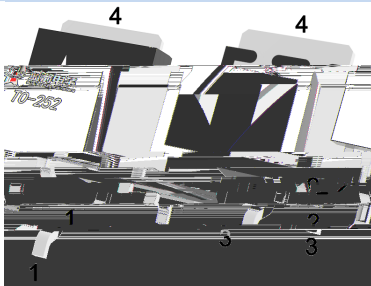
$R_{DS(on)}@4.5V$  42m (Type.30m )

)í D }o HF Product.

**— ÷ / Applications**

9 , ýo o W y LED ° 9 ôE y c 5 v o

Boost converters and synchronous rectifiers for consumer, telecom, industrial power supplies and LED backlighting.

**^ W ] Ô / Equivalent Circuit****Û æ / Pinning**

PIN1 y G

PIN 2 y D

PIN 3 y S

PIN 4 y D

**, M V / Marking**

- ~ “ ¢o See Marking Instructions.

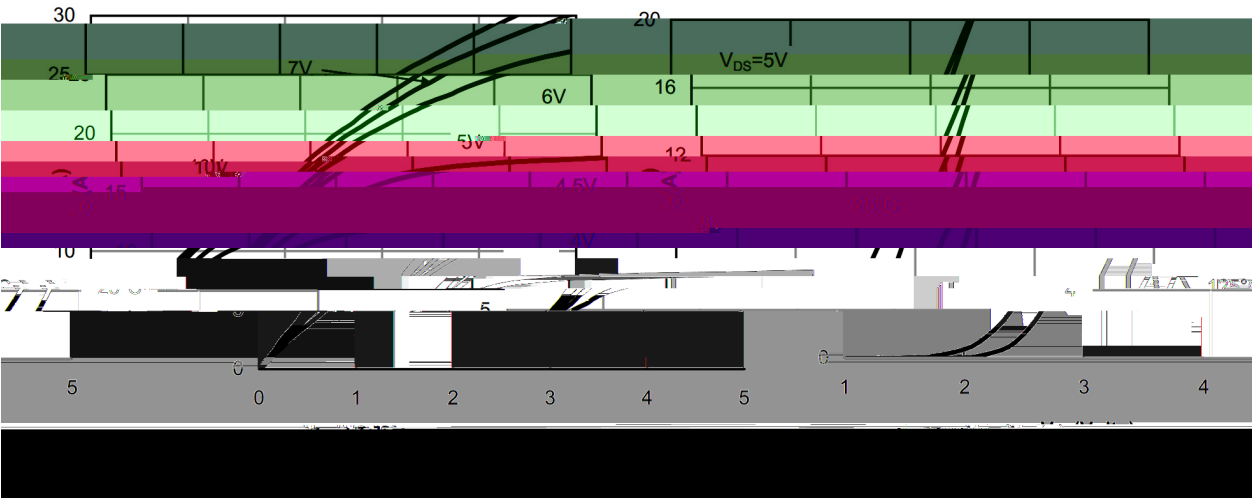
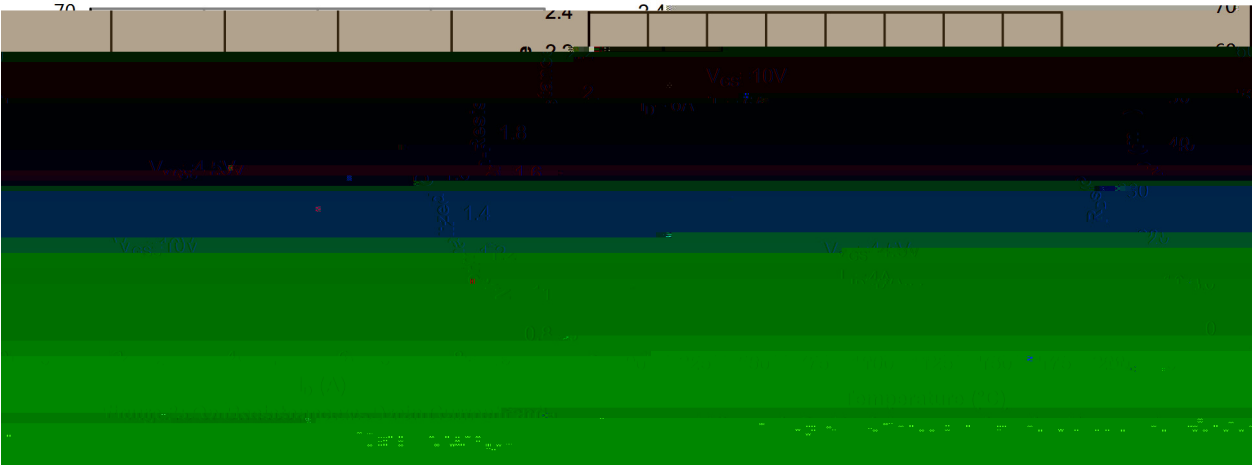
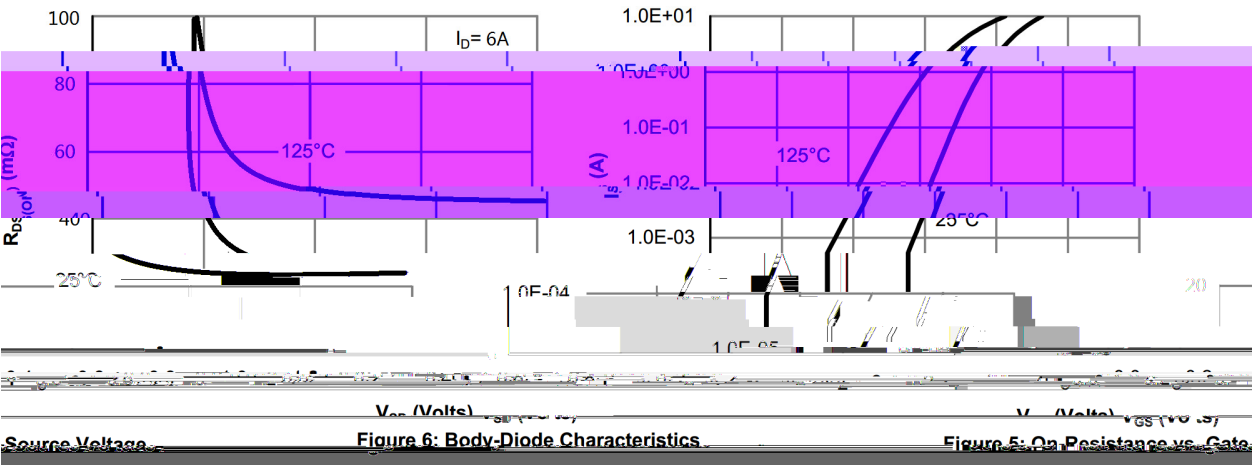
# BRCS20N06DP

Rev.C Jun.-2023

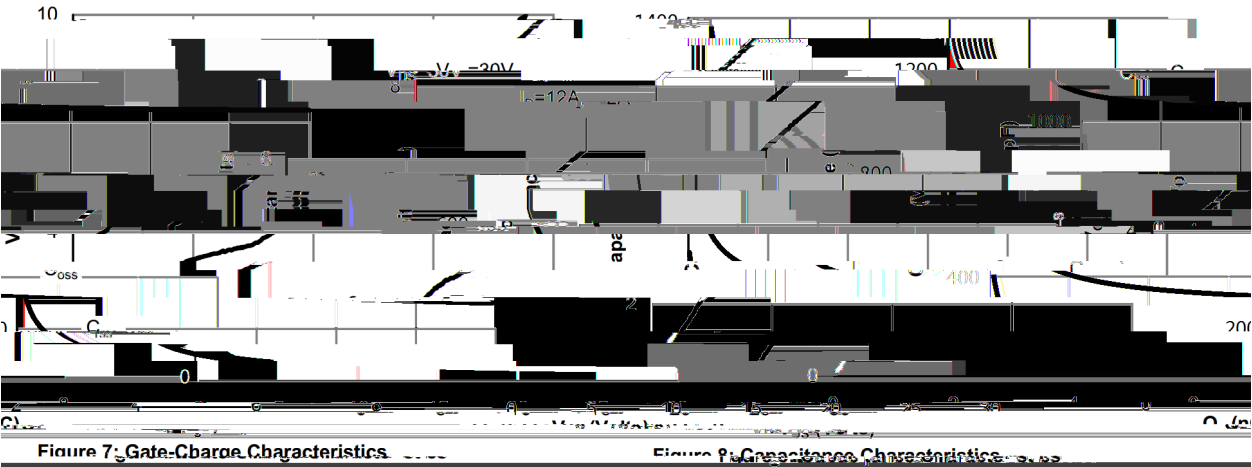
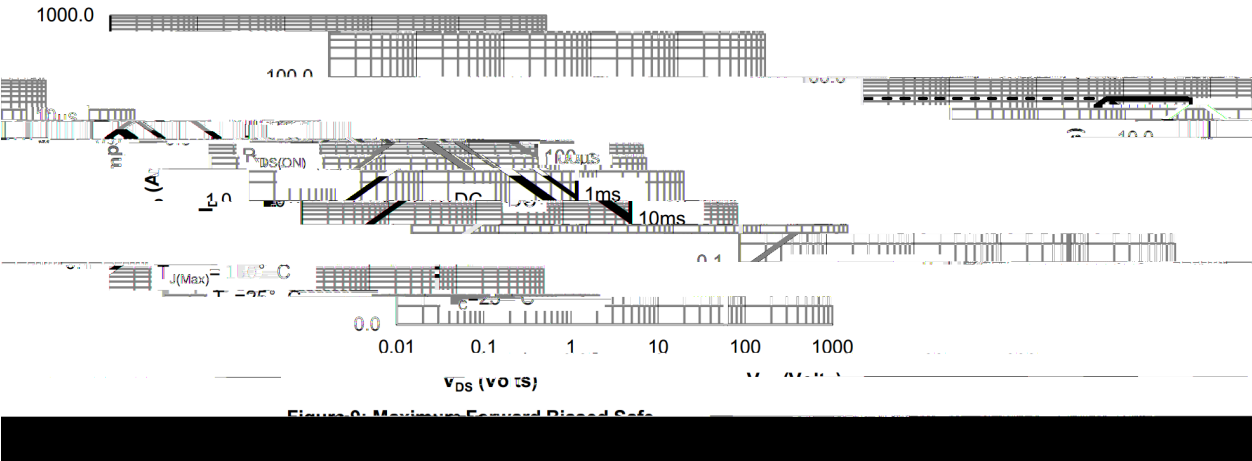
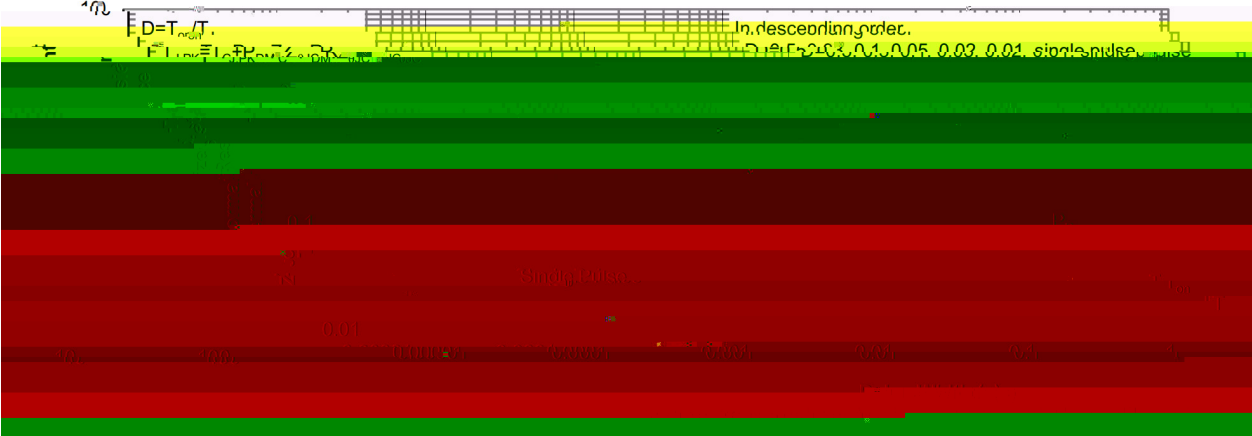
| @<br>Parameter                          | Z<br>Symbol                 | Rating     | % y<br>Unit |
|-----------------------------------------|-----------------------------|------------|-------------|
| Drain-Source Voltage                    | $V_{DS}$                    | 60         | V           |
| Drain Current                           | $I_D(T_C=25^\circ\text{C})$ | 20         | A           |
| Drain Current - Pulsed                  | $I_{DM}$                    | 47         | A           |
| Gate-Source Voltage                     | $V_{GS}$                    | $\pm 20$   | V           |
| Avalanche energy( $L=0.5\text{mH}$ )    | $E_{AS}$                    | 58         | mJ          |
| Avalanche Current( $L=0.5\text{mH}$ )   | $I_{AS}$                    | 13         | A           |
| Power Dissipation                       | $P_D(T_C=25^\circ\text{C})$ | 33.6       | W           |
| Operating and Storage Temperature Range | $T_J, T_{STG}$              | -55 to 150 |             |

**BRCS20N06DP**

Electrical Characteristic Curve

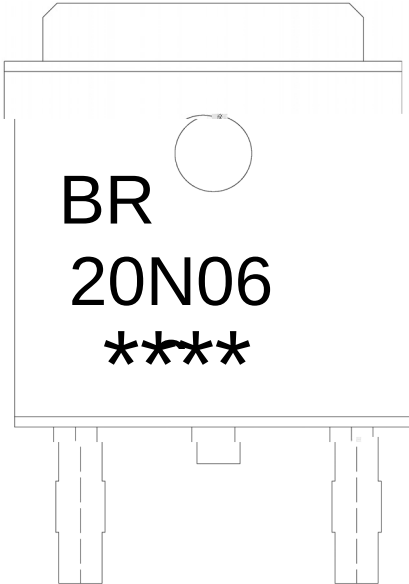


Electrical Characteristic Curve





, M y / Marking Instructions



“ ¢ y  
BR y , [ W A  
20N06 y ” Z W A  
y      ŷD Z W A k ŷD Z J  
Note:  
BR: Company Code  
20N06: Product Type  
\*\*\*\*: Lot No. Code, code change with Lot No

WD t    ¢    (x / ) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6

|  |
|--|
|  |
|  |
|  |
|  |
|  |
|  |
|  |

“ ¢ y

1o ~ %    150 %180 - k    60 %90sec;  
2o Q    245 r5 - k    4 Ò    5 r0.5sec;  
3o D N òi Ò ,    2 %10 - /sec.

Note:

1.Preheating:150~180 - , Time:60~90sec.  
2.Peak Temp.:245 r5 - , Duration:5 r0.5sec.  
3. anceJ /TT6 to Solder.6(14012 H)-2me:73 1 est Condi7 1 s