5 Ø / Descriptions

TO-252 .> / / x N ?œ 3MOS « | o

N-CHANNEL MOSFET in a TO-252 Plastic Package.

/“ / Features

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

R_{DSON}@10V 37m (Type.25m)

R_{DSON}@4.5V 42m (Type.30m)

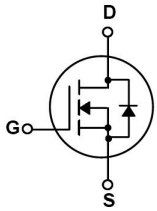
)í D }o HF Product.

—÷ / Applications

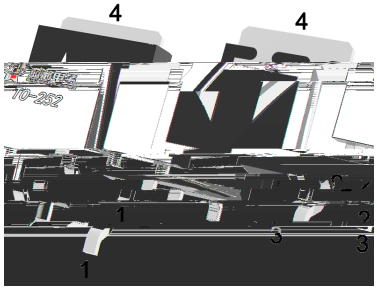
9 ¸ ÿo o W y LED ° 9 ôE y c 5 v o

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

ˆ 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.

@ Parameter	Z Symbol	 Rating	% y Unit
Drain-Source Voltage	V_{DSS}	60	V
Drain Current	I_D(Tc=25)	20	A
Drain Current - Pulsed	I_{DM}	47	A
Gate-Source Voltage	V_{GS}	±20	V
Avalanche energy(L=0.5mH)	E_{AS}	58	mJ
Avalanche Current(L=0.5mH)	I_{AS}	13	A
Power Dissipation	P_D(Tc=25)	33.6	W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to 150	

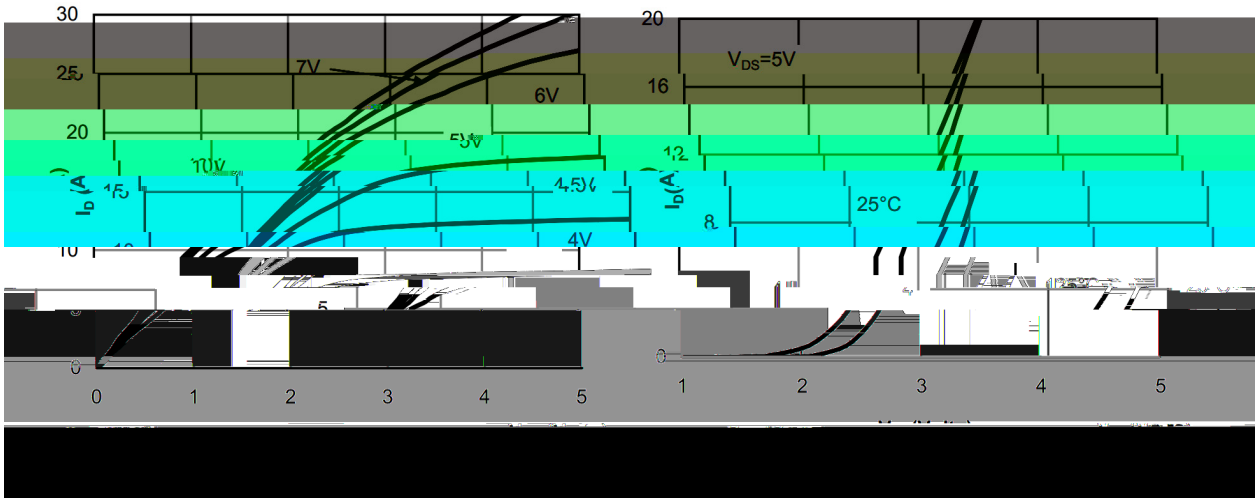
Thermal Resist 7.93.ermal Resi33.6 W «ç%‰(Aó IX g #À!ˆm UX†E Qw“äFHÔ3BVP !„ @Ù–åV%cHH $ÿ

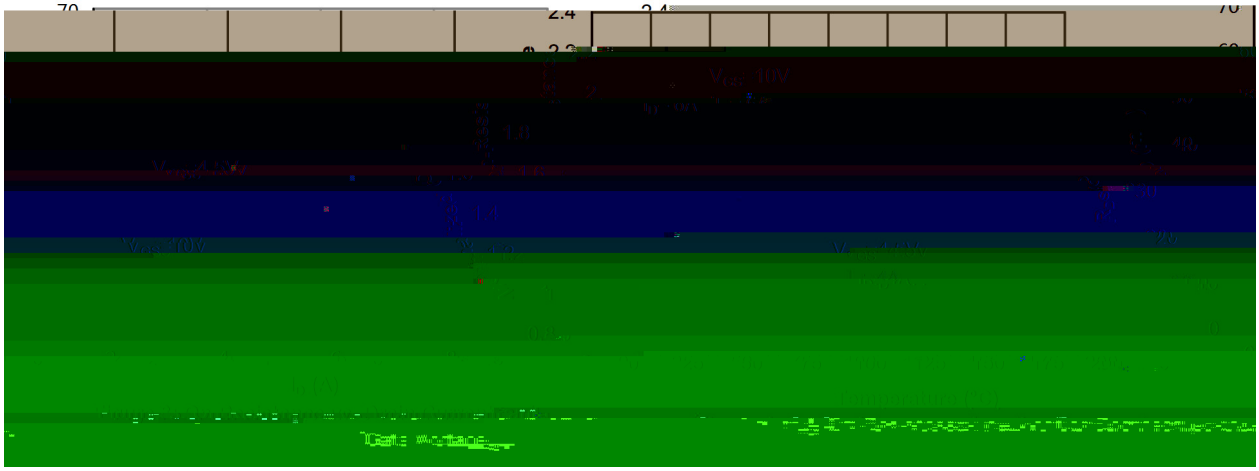
Parameter Z

Symbol

BRCS20N06DP

Ô? d ¢ / Electrical Characteristic Curve





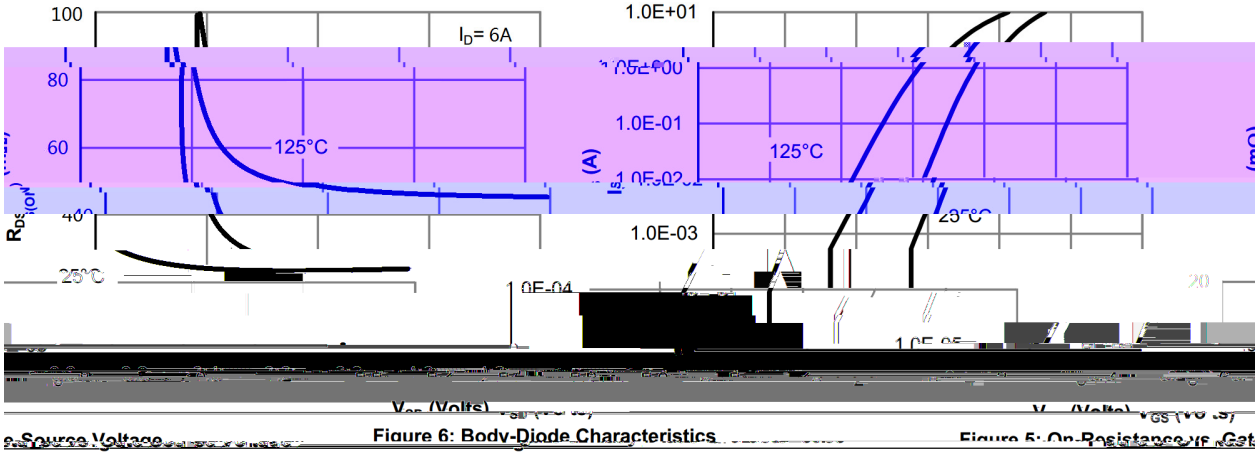


Figure 6: Body-Diode Characteristics

Ô? d ¢ / Electrical Characteristic Curve

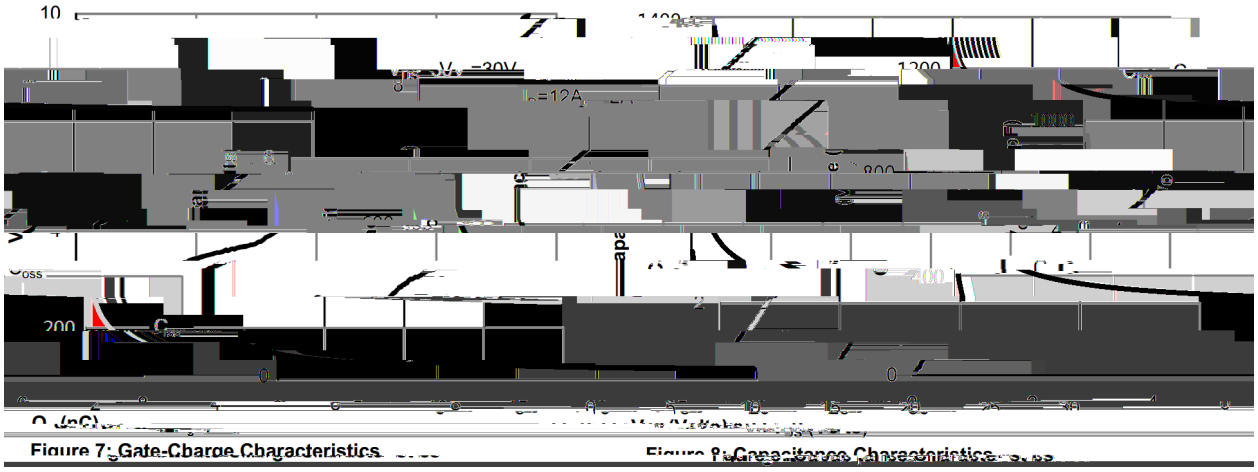


Figure 7: Gate-Charge Characteristics

Figure 8: Capacitance Characteristics

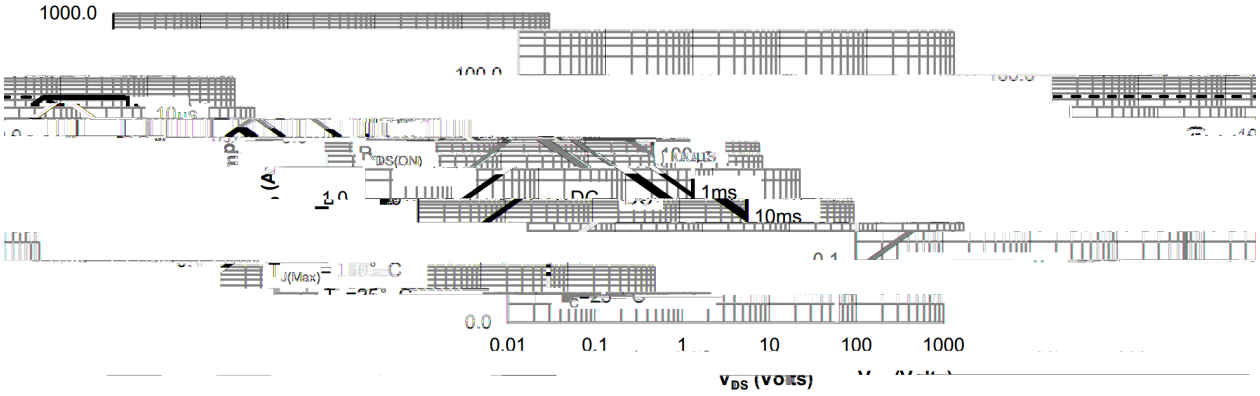
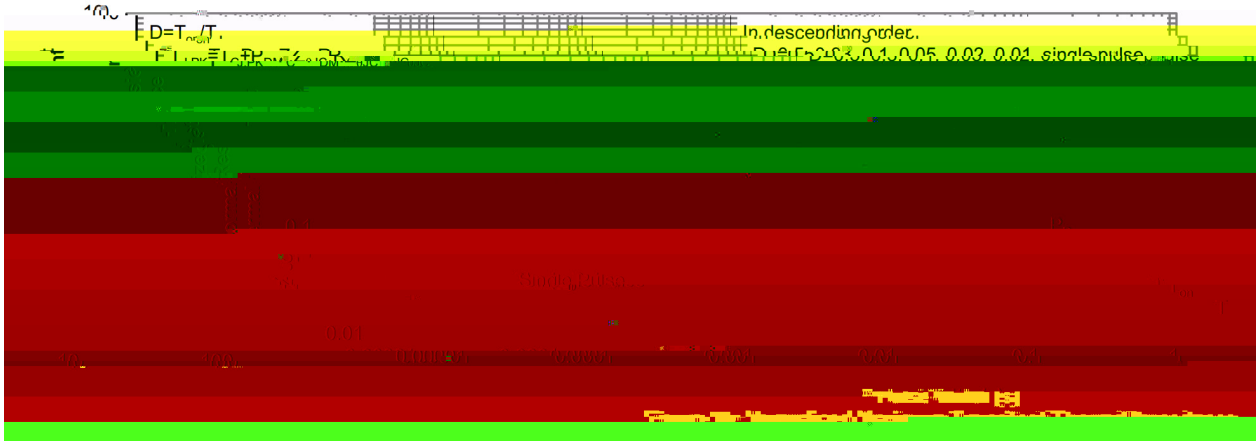
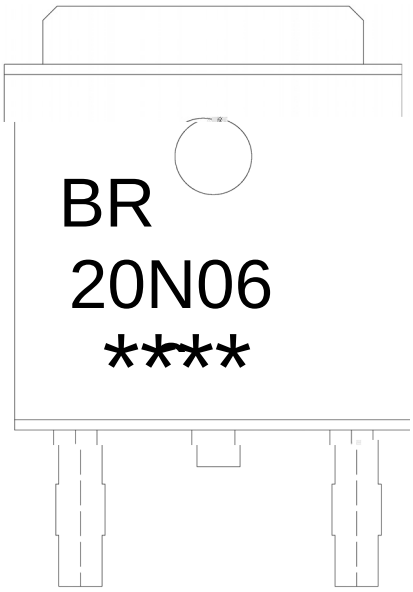


Figure 9: Maximum Forward Biased Safe



BRCS20N06DP

, M y / Marking Instructions



“ ¢ y

BR y , [W A

20N06 y ” Z W A

y ÿD Z W A k ÿD 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 Ò0 , 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