

/ Descriptions

TO-251

P

P-CHANNEL MOSFET in a TO-251 Plastic Package.

/ Features

 $V_{DS} (V) = -60V$ $I_D = -20A$ ($V_{GS} = \pm 20V$) $R_{DS(ON)} @ -10V \leq 75m\Omega$ (Typ. 62m Ω) $R_{DS(ON)} @ -4.5V \leq 100m\Omega$ (Typ. 70m Ω)

HF Product.

/ Applications

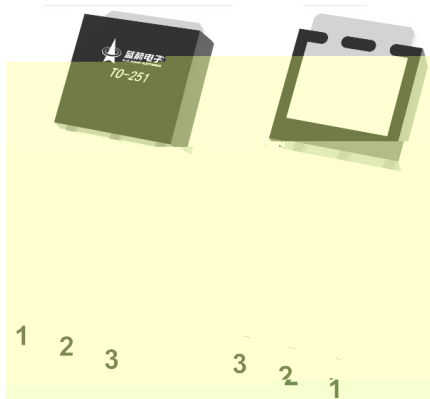
DC/DC

Suited for low voltage applications such as automotive, DC/DC Converters, and high efficiency switching for power management in portable and battery operated products.

/ Equivalent Circuit



/ Pinning



PIN1 G

PIN 2 D

PIN 3 S

/ Marking

See Marking Instructions.



Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	-60	V
Gate-Source Voltage	V_{GSS}	± 20	V
Continuous Drain Current	$I_D (T_c=25^\circ\text{C})$	-20	A
Pulsed Drain Current	I_{DM}	-80	A
Avalanche Current	I_{AS}	-13.8	A
Avalanche energy $L=0.5\text{mH}$	E_{AS}	95	mJ
Power Dissipation for Single Operation	$P_D (T_c=25^\circ\text{C})$	45	W
Maximum Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	
Thermal Resistance-Junction to Ambient	$R_{\theta f}$		

Electrical Characteristic Curve

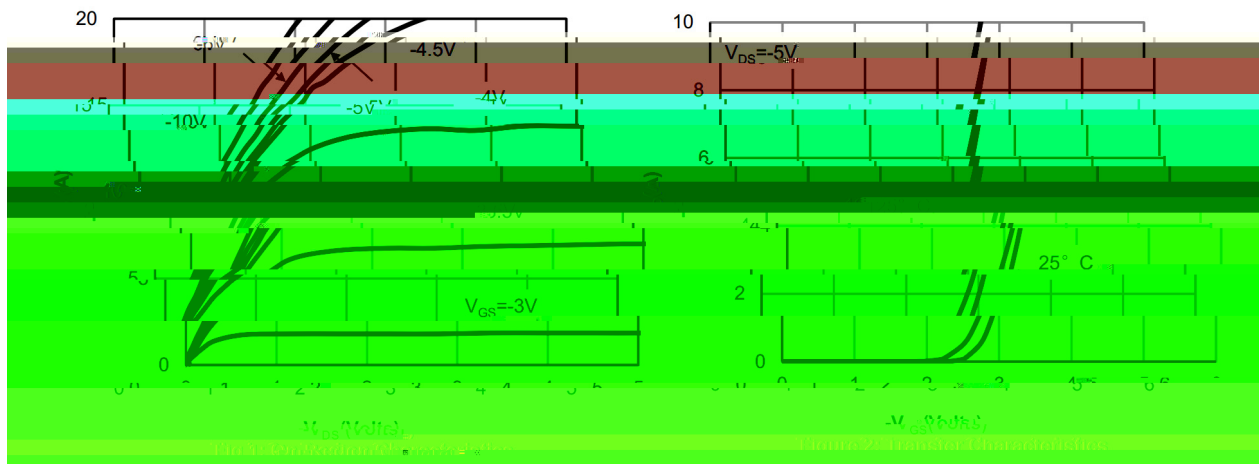
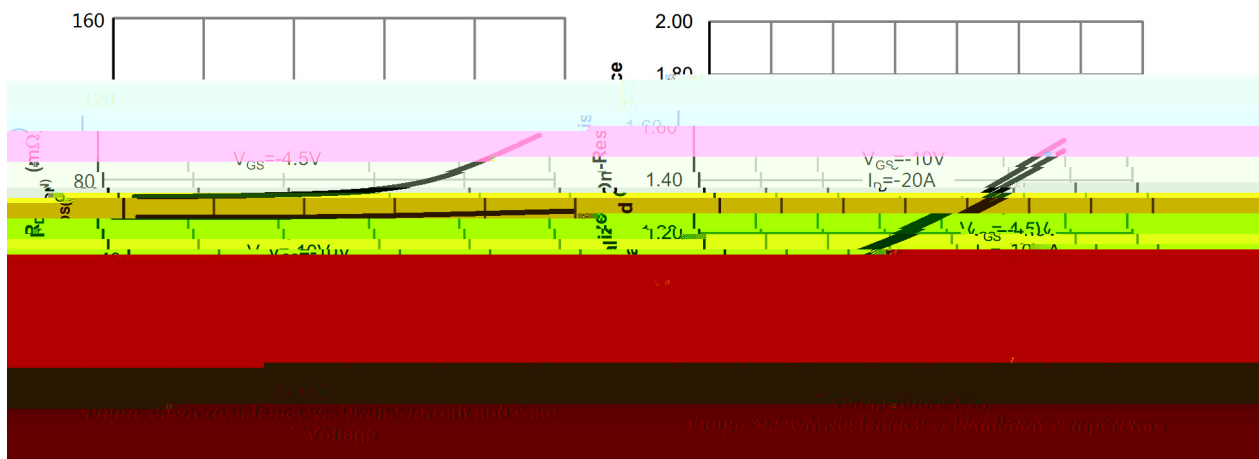
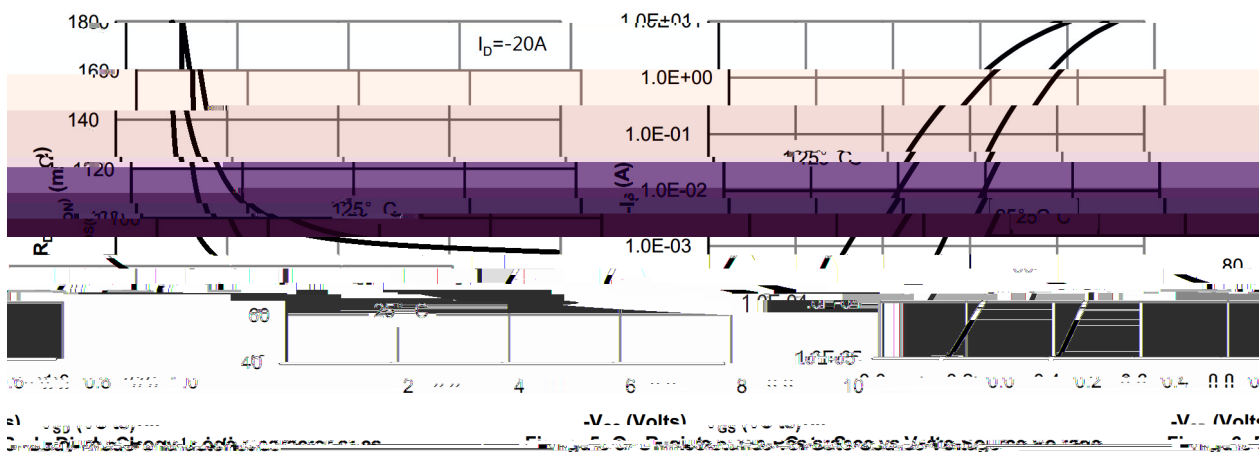


Fig. 1. I_D vs. V_{DS} and g_m vs. V_{DS} (at $V_{GS} = -3V$)
 Fig. 2. $R_{DS(on)}$ vs. I_D and R_{JA} vs. I_D (at $V_{GS} = -4.5V$)
 Fig. 3. P_D vs. T_J and R_{JA} vs. T_J (at $I_D = -20A$)

/ Electrical Characteristic Curve

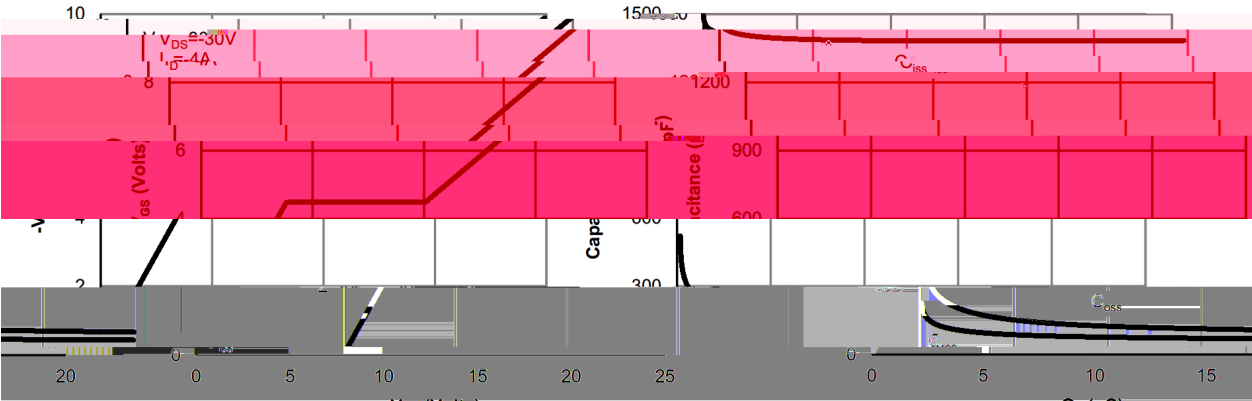
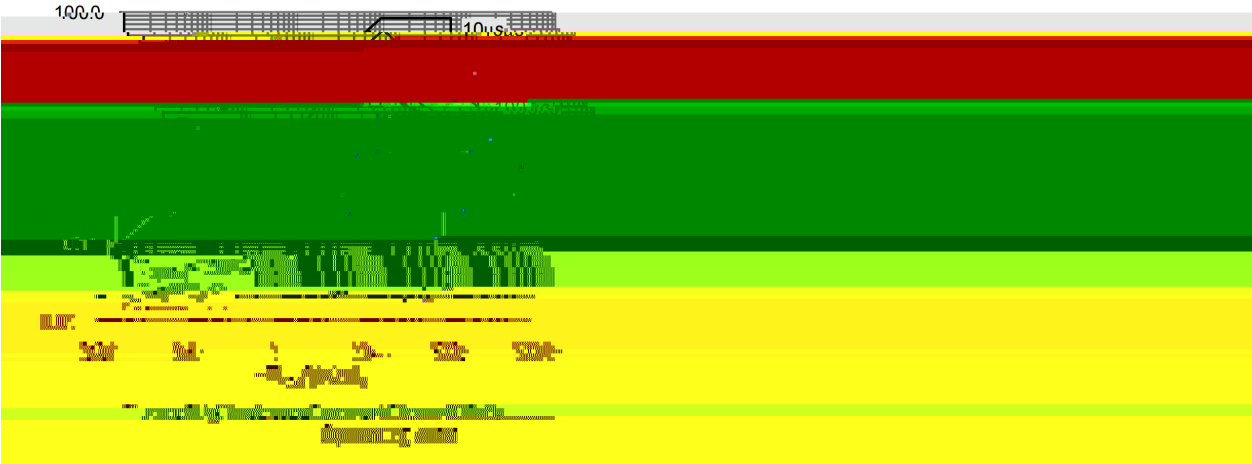
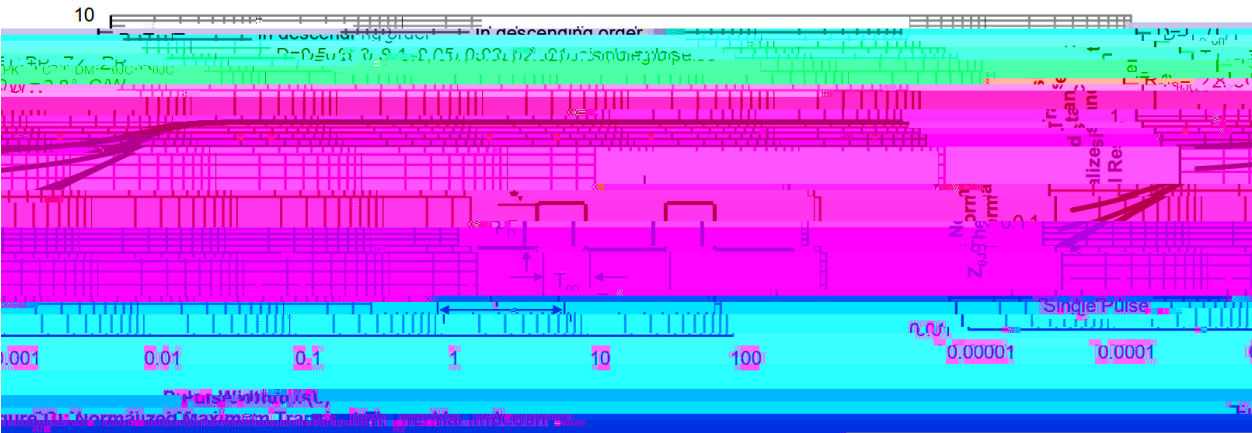


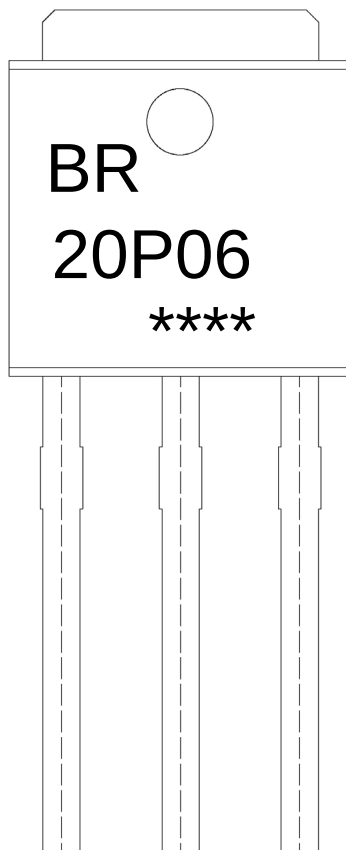
Figure 2: Capacitance Characteristics

Figure 3: Gate Charge Characteristics



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/ Marking Instructions



BR

20P06

Note:

BR: Company Code

20P06: Product Type Code

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

