

BRCS060N04DP

Rev.A Aug.-2023

/ Descriptions

TO-252 N

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

/ Features

$V_{DS}(V)=40V$ $I_D=70A$

$R_{DS(ON)}@10V<6m$ (Typ. 5.6mR)

$R_{DS(ON)}@4.5V<12m$ (Typ. 10.8mR)

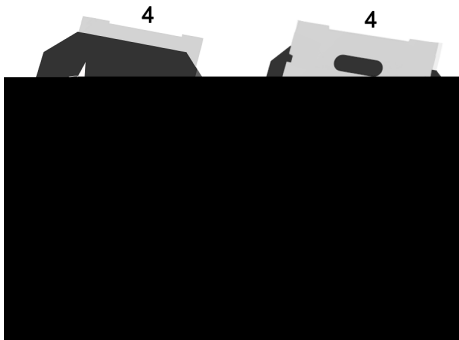
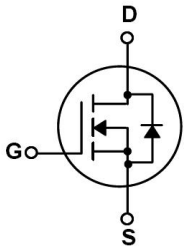
HF Product.

/ Applications

DC/DC

—^a

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



PIN1 G

PIN 2 D

PIN 3 S

PIN 4 D

/ Marking

See Marking Instructions.

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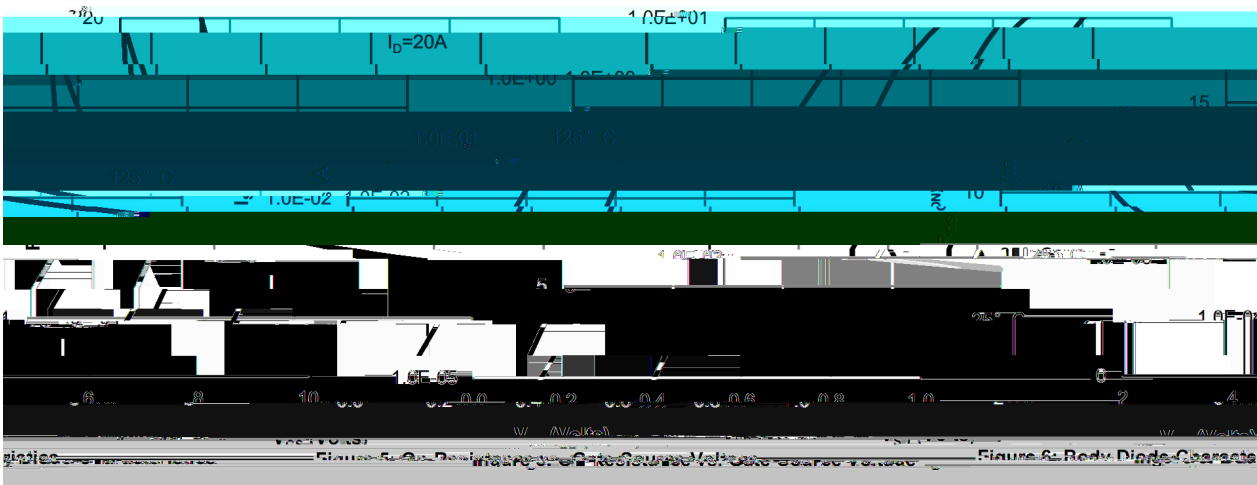
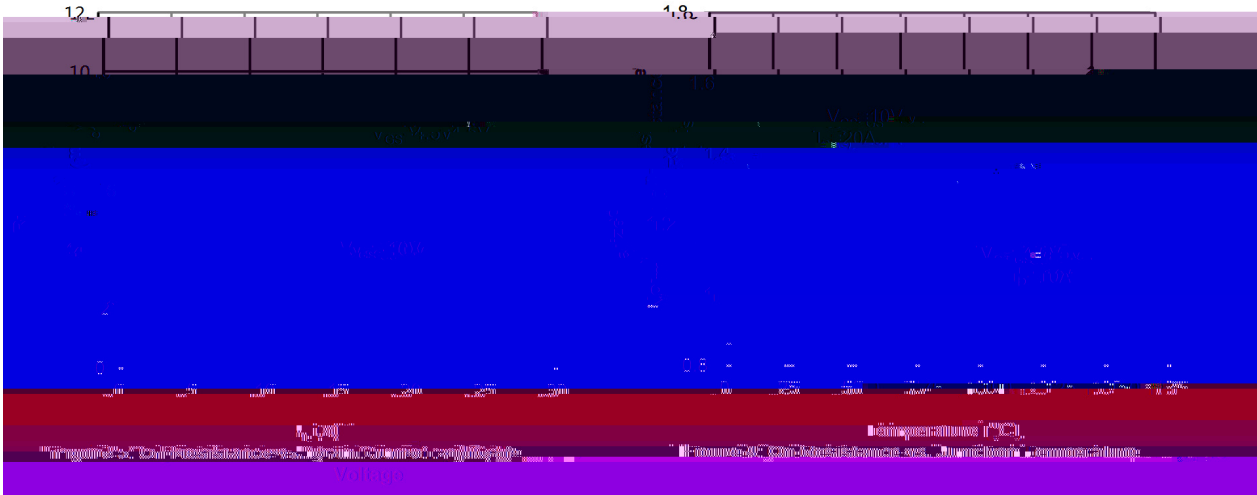
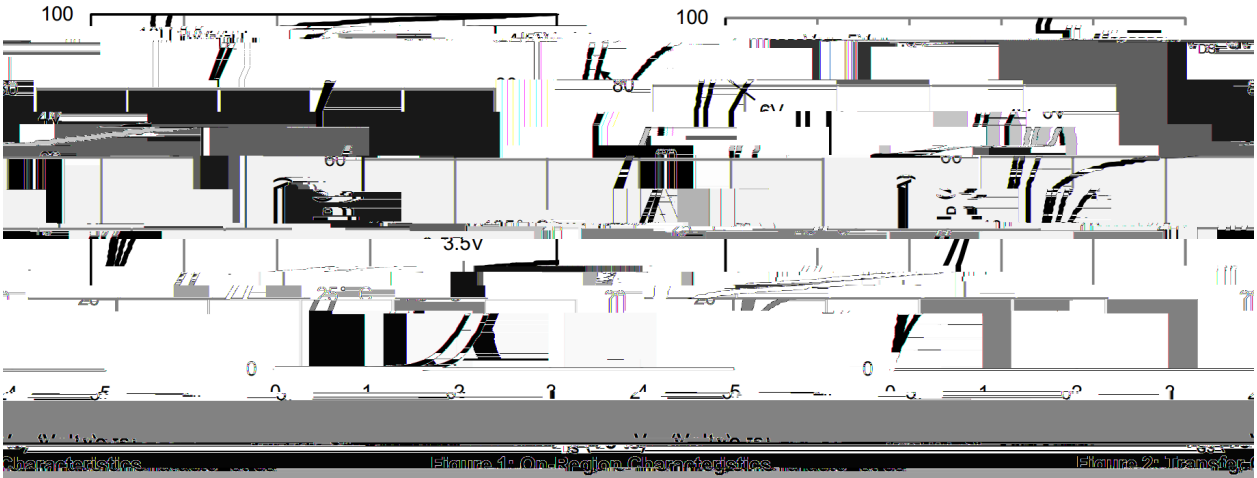
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Parameter		Symbol	Rating	Unit
Drain-Source Voltage		V_{DSS}	40	V
Drain Current		$I_D(T_C=25^\circ\text{C})$	70	A
Drain Current - Pulsed		I_{DM}	159	A
Gate-Source Voltage		V_{GS}	± 20	V
Avalanche Current		I_{AS}	24.5	A
Single Pulsed Avalanche Energy(L=0.5mH)		E_{AS}	192	mJ
Power Dissipation		$P_D(T_C=25^\circ\text{C})$	50	W
Junction and Storage Temperature Range		T_J, T_{STG}	-55 to 150	
Thermal Resistance-Junction to Ambient	t 10s	R_{JA}	20	/W
	Steady-State		50	
Thermal Resistance-Junction to Case	Steady-State	R_{JC}	2.5	

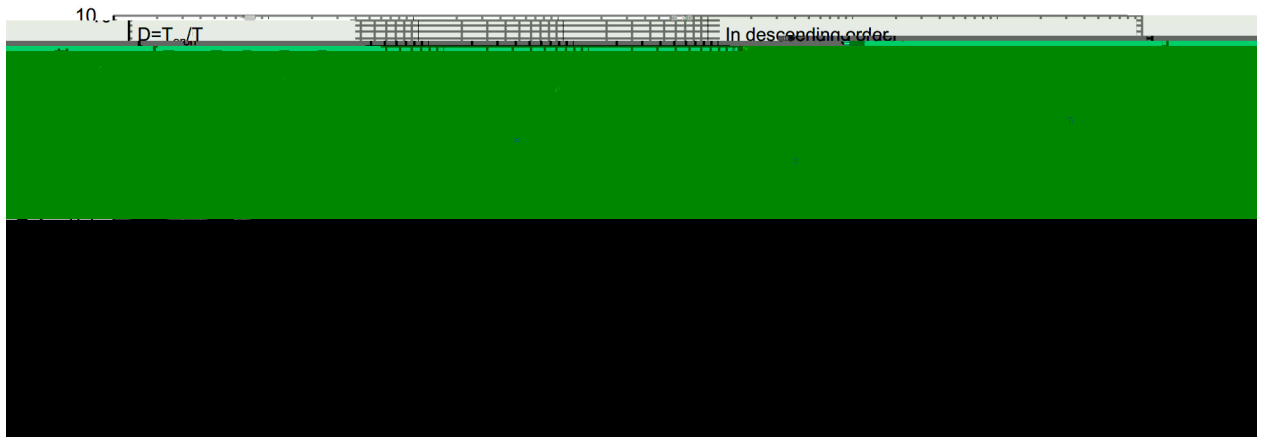
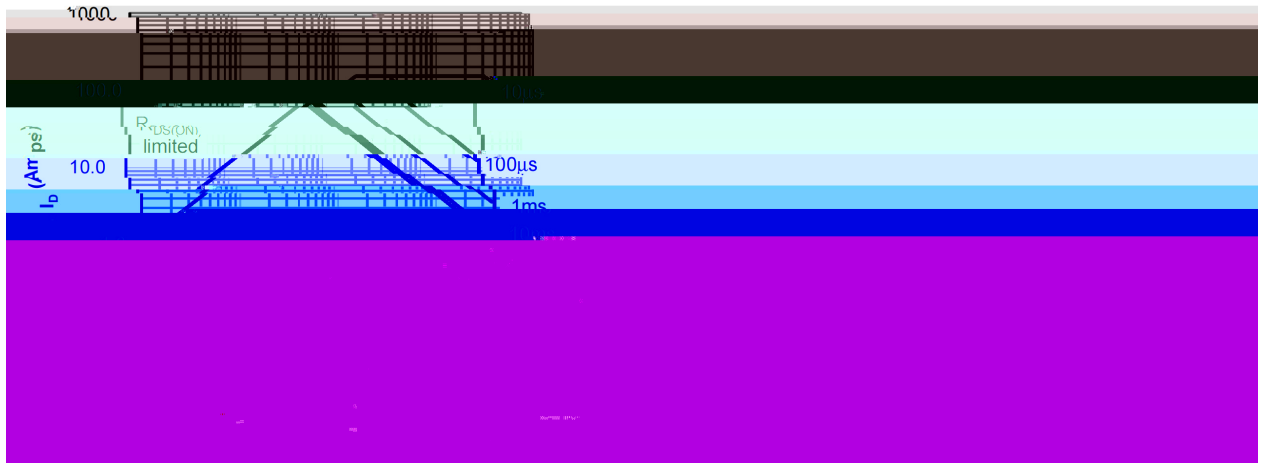
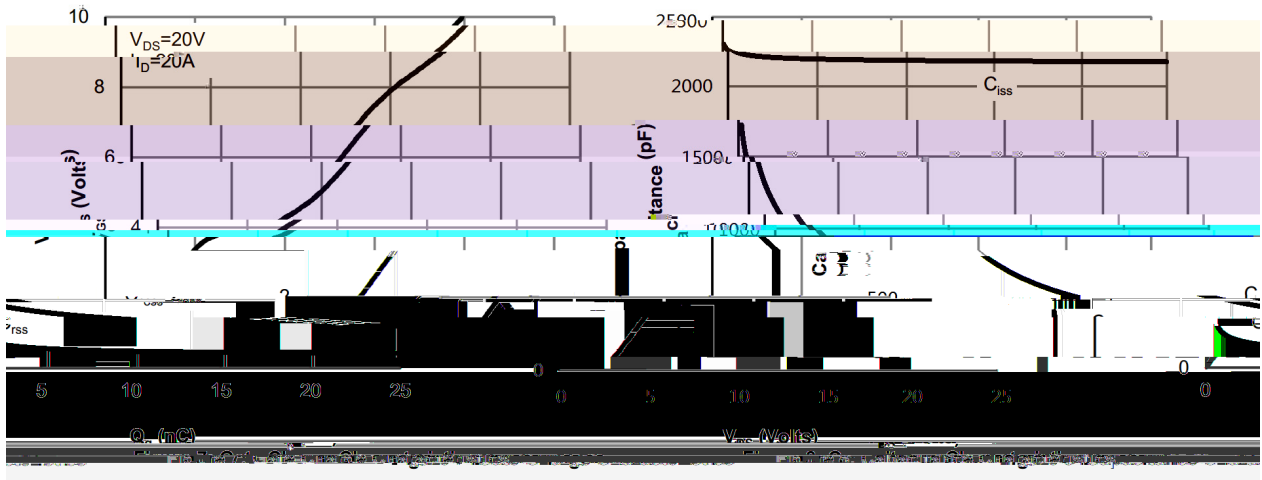
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=250\mu A$	40	46		V
Zero Gate Voltage Drain Current	I					

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
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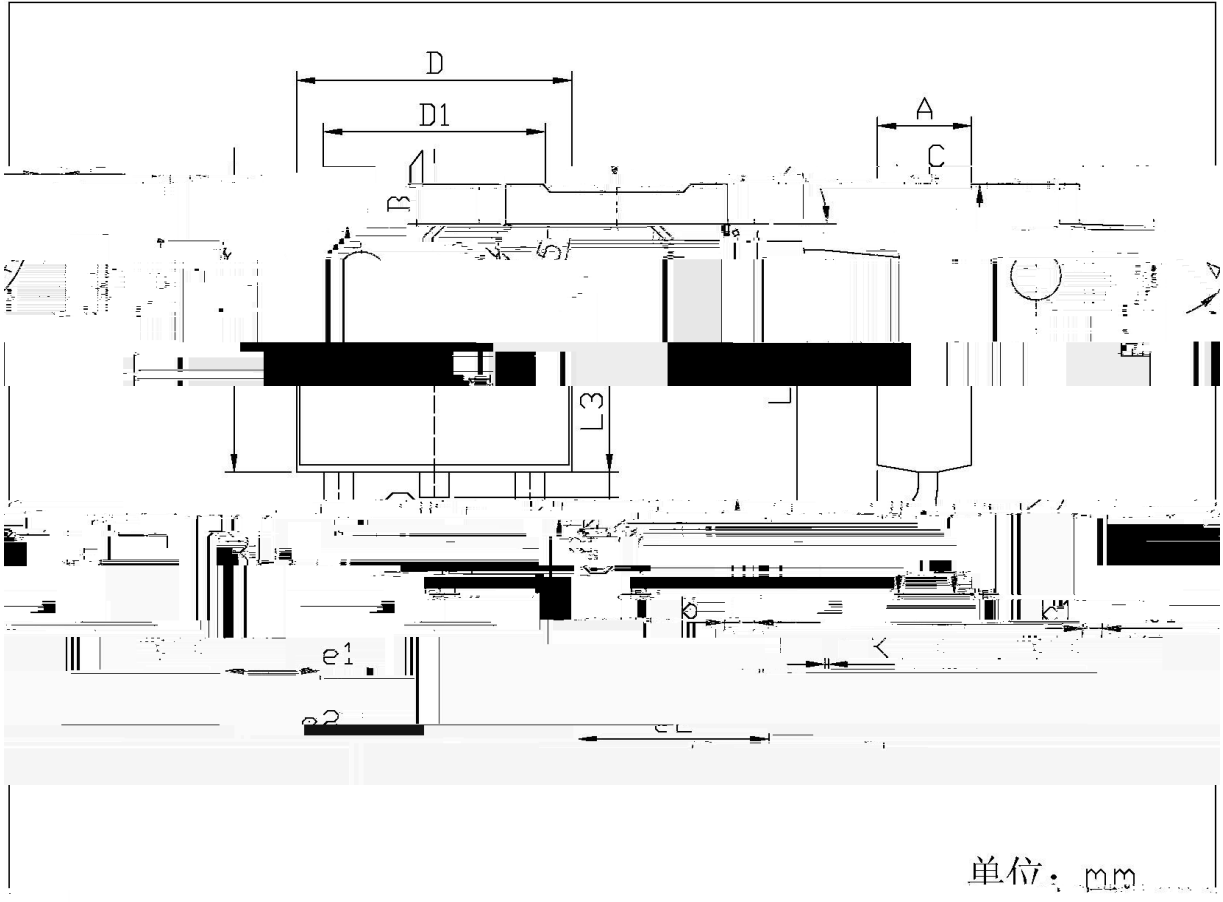
/ Electrical Characteristic Curve



/ Electrical Characteristic Curve



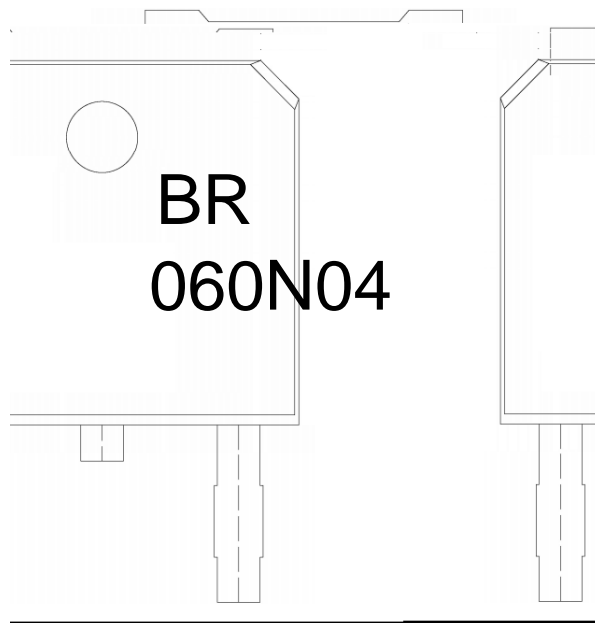
/ Package Dimensions



Dimensions		Millimeters		Dimensions		In Millimeters	
Symbol	Value	Min	Max	Symbol	Value	Min	Max
A	2.25	2.25	2.25	B	0.95	0.95	0.95
e1	2.24	2.24	2.34	L3	0.60	0.60	0.60
e2	2.34	2.34	2.34	CL	10.00	10.00	10.00
D	5.10	5.10	5.50	D1	5.10	5.10	5.50

T0-252

/ Marking Instructions



BR

060N04

Note:

BR: Company Code

060N04: Product Type Code

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

BRCS060N04DP