

/ Revised record

/ Descriptions

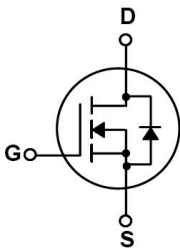
TO-252
N-Channel Enhancement Mode Field Effect Transistor in a TO-252 Plastic Package.

/ Features

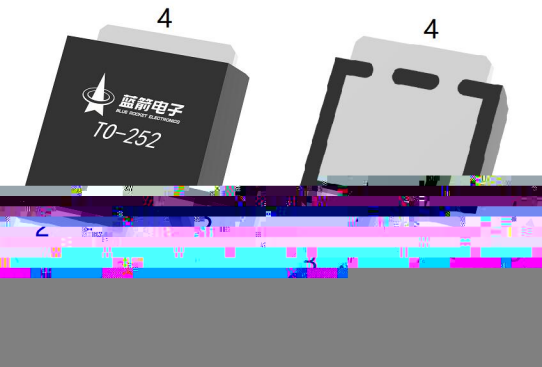
/ Applications

DC/DC Converters in Computing, Suitable for general purpose, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



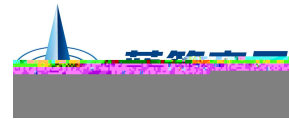
/ Pinning



PIN1 G PIN 2 D PIN 3 S PIN 4 D

/ Marking

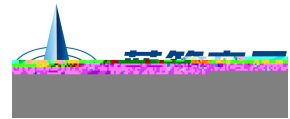
See Marking Instructions.



Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	30	V
Drain Current	$I_D(T_c=25^{\circ}\text{C})$	67	A
Drain Current - Pulsed	I_{DM}	140	A
Gate-Source Voltage	V_{GSS}	± 20	V
Single Pulsed Avalanche Energy(L=0.5mH)	E_{AS}	185	mJ
Avalanche Current	I_{AS}	21.5	A
Power Dissipation	$P_D(T_c=25^{\circ}\text{C})$	29	W

BRCS060N03DPQ

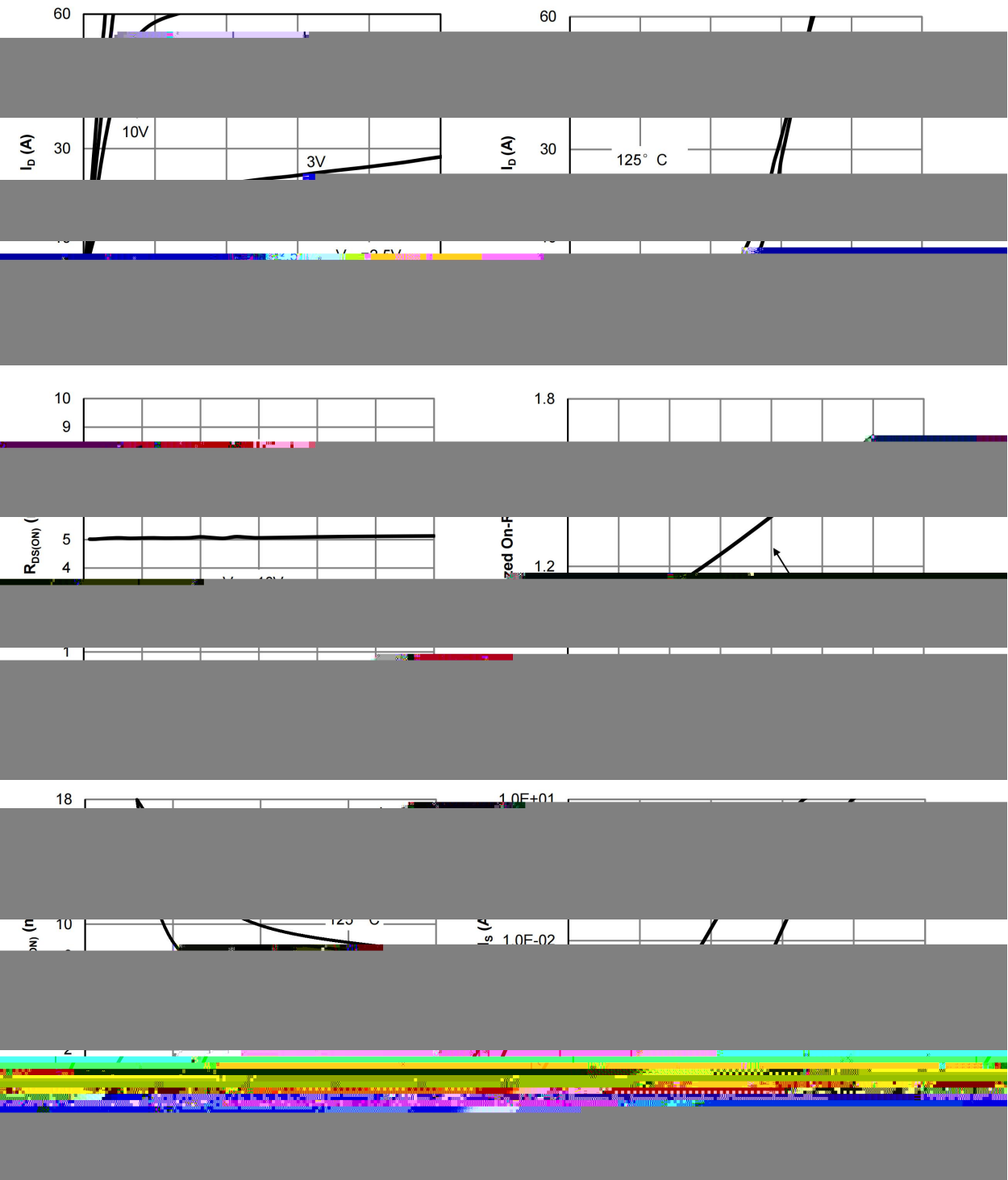
Rev.A Jun.-2022



DATA SHEET

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	$Q_{g(10V)}$	$V_{GS}=10V$ $V_{DS}=15V$ I				

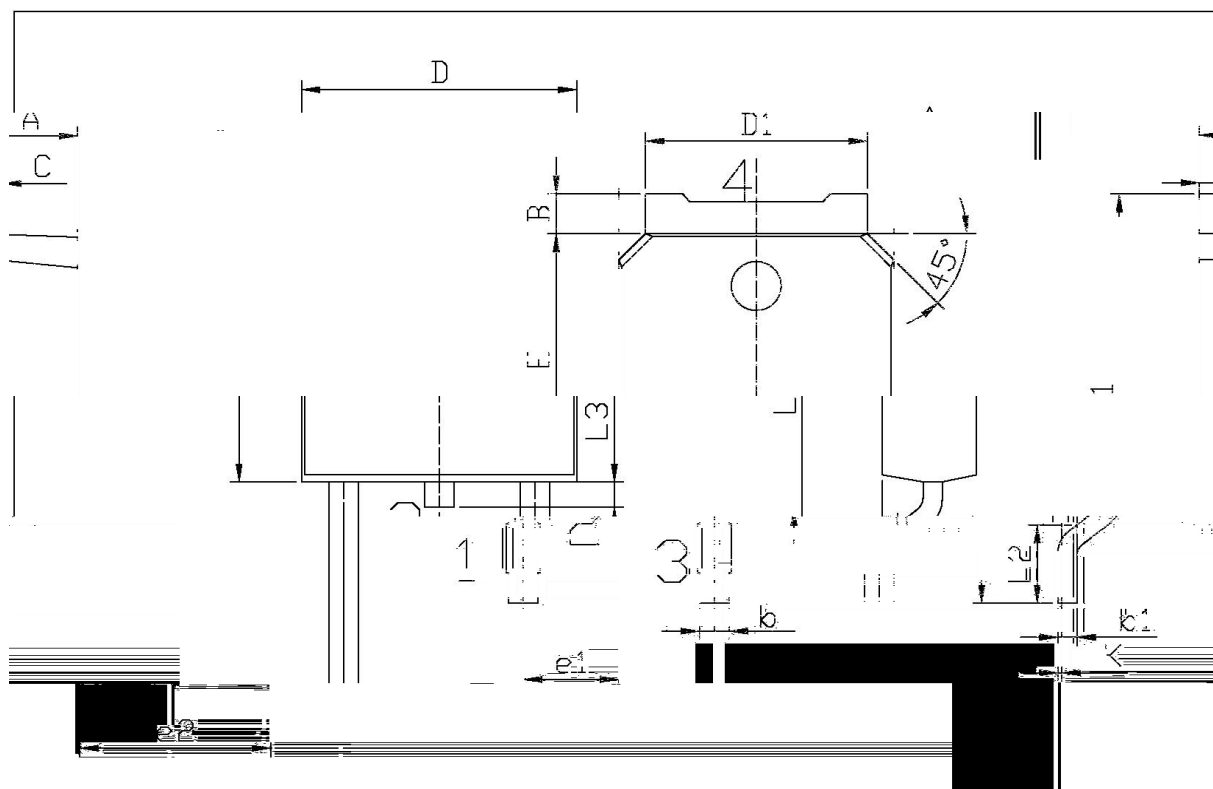
/ Electrical Characteristic Curve



/ Electrical Characteristic Curve



/ Package Dimensions

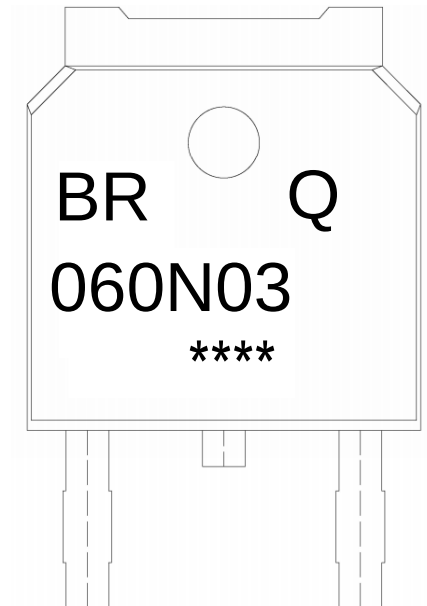


单位: mm

Dimeric Isotactic Polypropylene				Dimeric Isotactic Polypropylene			
Max. Δ		Sym		Max. Δ		Sym	
6.25	2.34	2.20	0.95	2.40	2.24	2.24	0.95
4.43	4.43	5.00	5.40	5.90	e1	e2	5.90
9.85	10.35	b1	0.45	0.55	1.1	1.2	0.45
1.70	2.00	0.75	0.45	0.55	1.2	1.2	0.45
6.45	6.75	L3	0.60	0.90	D	D	0.60
5.10	5.50	0.40	0.00	0.00	0.00	0.00	0.00

TN-252

/ Marking Instructions



BR

Q

060N03

Note:

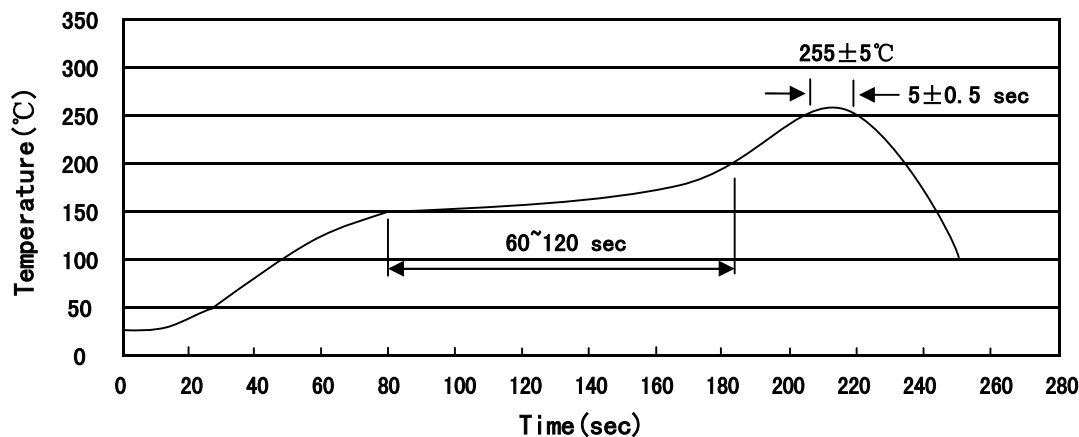
BR: Company Code

Q: Automobile halogen-free product Code

060N03: Product Type Code

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

() /



Note:

- | | | | | | |
|---|-------|-----|-----------|-----------|--|
| 1 | 150 | 200 | 60 | 120sec; | 1.Preheating:150~200°C, Time:60~120sec. |
| 2 | 255±5 | | | 5±0.5sec; | 2.Peak Temp.:255±5°C, Duration:5±0.5sec. |
| 3 | | 2 | 10°C/sec. | | 3. Cooling Speed: 2~10°C/sec. |

/ Resistance to Soldering Heat Test Conditions

260±5°C

10±1 sec.

Temp.:260±5°C

Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
TO-252	2,500	2	5,000	6	30,000	13" ×16	360×360×50	380×335×366

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-251/252	75	48	3,600	5	18,000	526×20.5×5.25	555×164×50	575×290×180

/ Notices