

# BRCs025N04DPQ

Rev.A Aug.-2024

## / Descriptions

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

## / Features

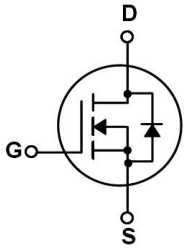
$R_{DS(on)}$              $C_{rss}$             AEC-Q101  
Low  $R_{DS(on)}$ , low gate charge, low  $C_{rss}$ , fast switching, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

## / Applications

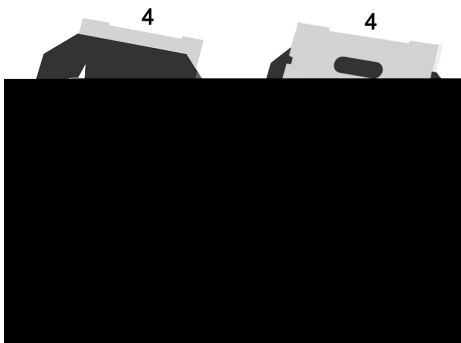
DC/DC

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

## / Equivalent Circuit



## / Pinning



PIN 1 G            PIN 2 D            PIN 3 S            PIN 4 D

## / Marking

See Marking Instructions.

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DATA SHEET

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	$V_{DSS}$	40	V
Drain Current	$I_D(T_C=25^\circ C)$	164	A
Drain Current - Pulsed	$I_{DM}$		

**/ Electrical Characteristics(Ta=25 )**

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=20V$ $R_L=1$ $R_{GEN}=3$		11		ns
Turn-On Rise Time	$t_r$			11		
Turn-Off Delay Time	$t_{d(off)}$			40		
Turn-Off Fall Time	$t_f$			10		

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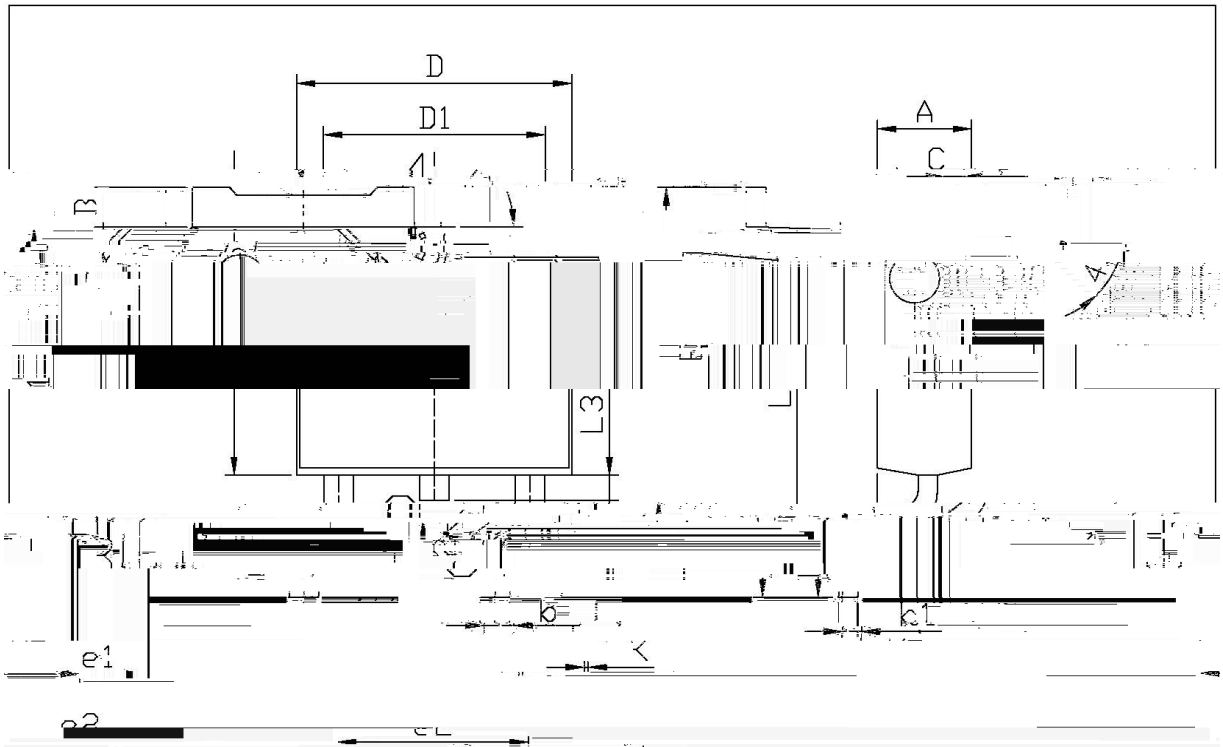
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**蓝箭电子**  
BLUE ROCKET ELECTRONICS

DATA SHEET

**/ Package Dimensions**

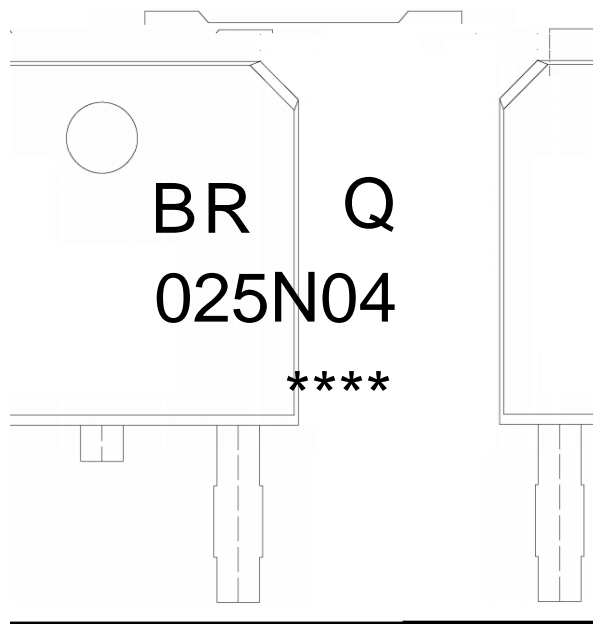


单位: mm

Dimensions		Millimeters		Dimensions		In Millimeters	
Symbol	Value	Symbol	Value	Symbol	Value	Symbol	Value
2-34	2.34	B	0.95	1-25	1.25	e1	2.24
h1	0.45	h2	0.55	h3	0.85	h4	0.35
h5	0.15	h6	0.55	h7	1.80	h8	0.80
h9	0.10	h10	0.75	h11	1.30	h12	0.80
h13	0.10	h14	5.10	h15	5.50	K	0.00

TO-252

**/ Marking Instructions**



BR

Q

025N04

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Note:

BR: Company Code

Q: Automobile halogen-free product Code

025N04: Product Type Code

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



( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)


Note:

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

/ Resistance to Soldering Heat Test Conditions

260±5                    10±1 sec.                    Temp.:260±5                    Time:10±1 sec

/ Packaging SPEC.

050, \$/AMBAD1.2004DT2004E704085c1000Sec017DT00(17ff-0(4f)35)+23638282204248.8-225.8(P)5.7(T)U5e(n)ieBB.22