

BRCS035

/ Descriptions

TO-252 N

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

/ Features

 $R_{DS(on)}$ C_{rss} AEC-Q101

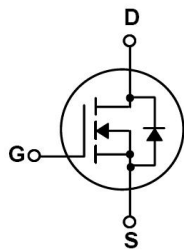
Low $R_{DS(on)}$, low gate charge, low C_{rss} , fast switching, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

/ 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



PIN1 G

PIN 2 D

PIN 3 S

PIN 4 D

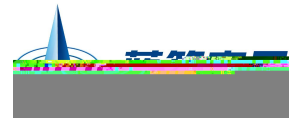
/ Marking

See Marking Instructions.

Rev.A Jun.-2022



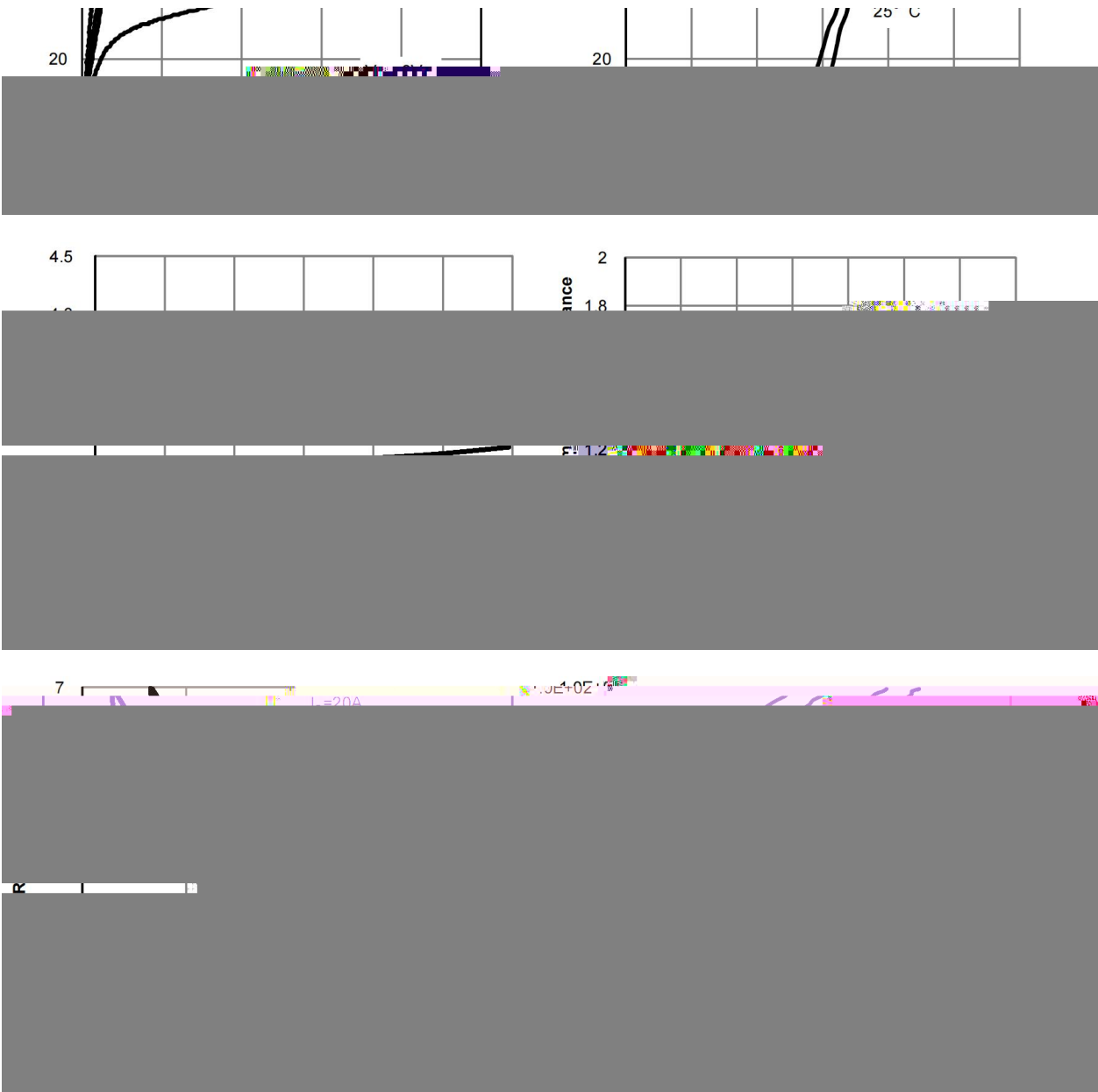
<http://www.fsbrec.com>



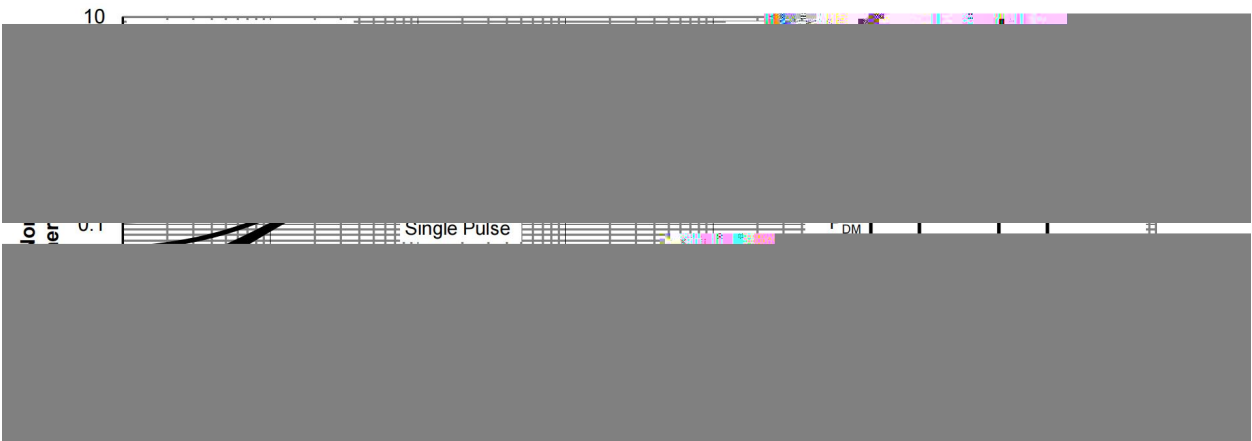
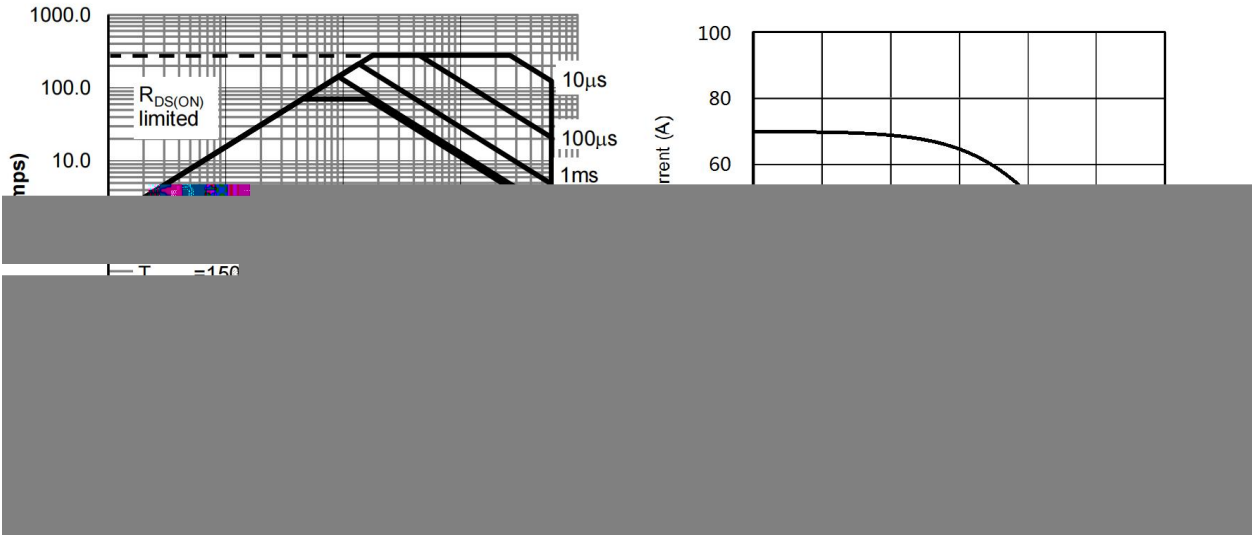
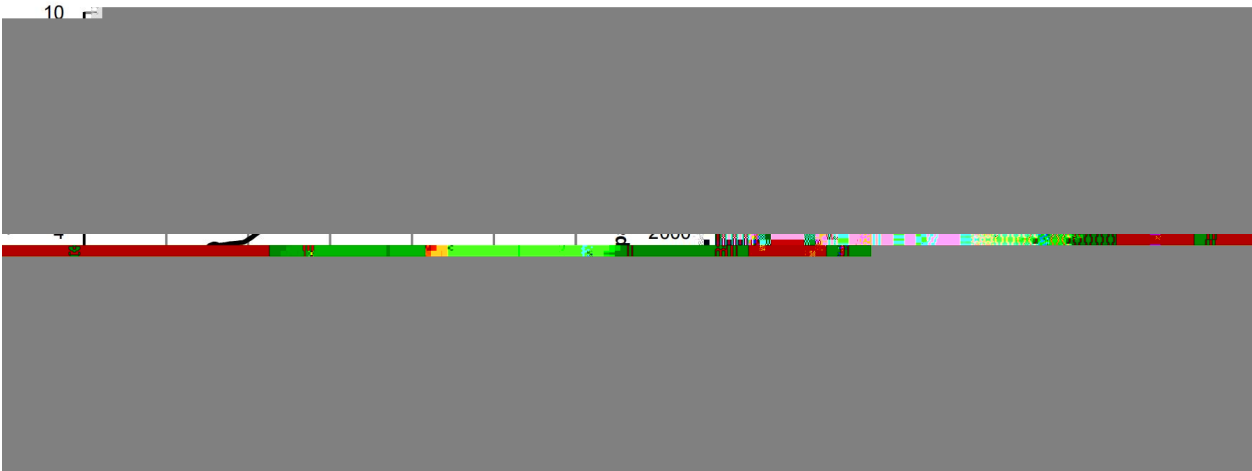
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=30V$ $R_L=1.5\ \Omega$ $R_{GEN}=3\ \Omega$		13		ns
Turn-On Rise Time	t_r			4		
Turn-Off Delay Time	$t_{d(off)}$			47		
Turn-Off Fall Time	t_f			6.5		

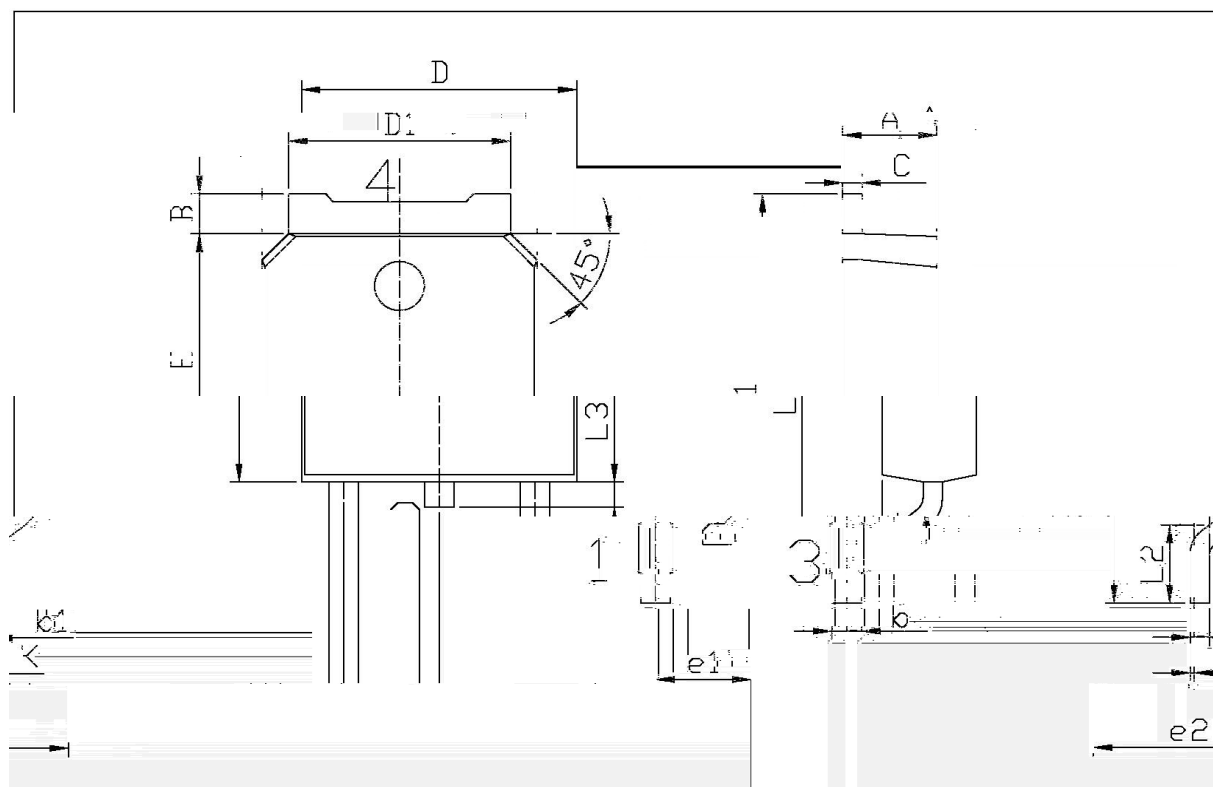
/ Electrical Characteristic Curve



/ Electrical Characteristic Curve



/ Package Dimensions

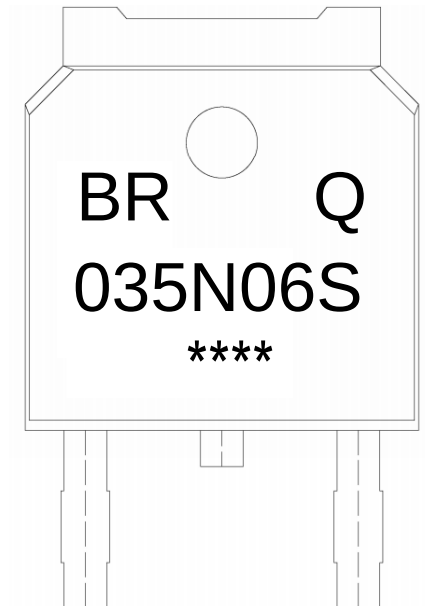


单位: mm

Dimensione in mm			Dimensione in mm		
15	20	25	30	35	40
1.70	2.00	2.30	2.60	2.90	3.20
0.60	0.90	1.20	1.50	1.80	2.10
0.45	0.55	0.65	0.75	0.85	0.95
0.30	0.40	0.50	0.60	0.70	0.80
0.20	0.30	0.40	0.50	0.60	0.70
0.10	0.20	0.30	0.40	0.50	0.60
0.05	0.10	0.15	0.20	0.25	0.30
0.02	0.05	0.08	0.12	0.15	0.20
0.01	0.02	0.03	0.04	0.05	0.06
0.005	0.01	0.015	0.02	0.025	0.03
0.002	0.005	0.008	0.012	0.015	0.02
0.001	0.002	0.003	0.004	0.005	0.006
0.0005	0.001	0.0015	0.002	0.0025	0.003
0.0002	0.0005	0.0008	0.0012	0.0015	0.002
0.0001	0.0002	0.0003	0.0004	0.0005	0.0006
0.00005	0.0001	0.00015	0.0002	0.00025	0.0003
0.00002	0.00005	0.00008	0.00012	0.00015	0.0002
0.00001	0.00002	0.00003	0.00004	0.00005	0.00006
0.000005	0.00001	0.000015	0.00002	0.000025	0.00003
0.000002	0.000005	0.000008	0.000012	0.000015	0.00002
0.000001	0.000002	0.000003	0.000004	0.000005	0.000006
0.0000005	0.000001	0.0000015	0.000002	0.0000025	0.000003
0.0000002	0.0000005	0.0000008	0.0000012	0.0000015	0.000002
0.0000001	0.0000002	0.0000003	0.0000004	0.0000005	0.0000006
0.00000005	0.0000001	0.00000015	0.0000002	0.00000025	0.0000003
0.00000002	0.00000005	0.00000008	0.00000012	0.00000015	0.0000002
0.00000001	0.00000002	0.00000003	0.00000004	0.00000005	0.00000006
0.000000005	0.00000001	0.000000015	0.00000002	0.000000025	0.00000003
0.000000002	0.000000005	0.000000008	0.000000012	0.000000015	0.00000002
0.000000001	0.000000002	0.000000003	0.000000004	0.000000005	0.000000006
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0.0000000002	0.0000000005	0.0000000008	0.0000000012	0.0000000015	0.000000002
0.0000000001	0.0000000002	0.0000000003	0.0000000004	0.0000000005	0.0000000006
0.00000000005	0.0000000001	0.00000000015	0.0000000002	0.00000000025	0.0000000003
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0.000000000005	0.00000000001	0.000000000015	0.00000000002	0.000000000025	0.00000000003
0.000000000002	0.000000000005	0.000000000008	0.000000000012	0.000000000015	0.00000000002
0.000000000001	0.000000000002	0.000000000003	0.000000000004	0.000000000005	0.000000000006
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0.0000000000002	0.0000000000005	0.0000000000008	0.0000000000012	0.0000000000015	0.000000000002
0.0000000000001	0.0000000000002	0.0000000000003	0.0000000000004	0.0000000000005	0.0000000000006
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0.00000000000001	0.00000000000002	0.00000000000003	0.00000000000004	0.00000000000005	0.00000000000006
0.000000000000005	0.00000000000001	0.000000000000015	0.00000000000002	0.000000000000025	0.00000000000003
0.000000000000002	0.000000000000005	0.000000000000008	0.000000000000012	0.000000000000015	0.00000000000002
0.000000000000001	0.000000000000002	0.000000000000003	0.000000000000004	0.000000000000005	0.000000000000006
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0.00000000000000001	0.00000000000000002	0.00000000000000003	0.00000000000000004	0.00000000000000005	0.00000000000000006
0.000000000000000005	0.00000000000000001	0.000000000000000015	0.00000000000000002	0.000000000000000025	0.00000000000000003
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0.00000000000000000000005	0.0000000000000000000001	0.00000000000000000000015	0.0000000000000000000002	0.00000000000000000000025	0.0000000000000000000003
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0.000000000000000000000005	0.00000000000000000000001	0.000000000000000000000015	0.00000000000000000000002	0.000000000000000000000025	0.00000000000000000000003
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ТН-252

/ Marking Instructions



BR

Q

035N06S

Note:

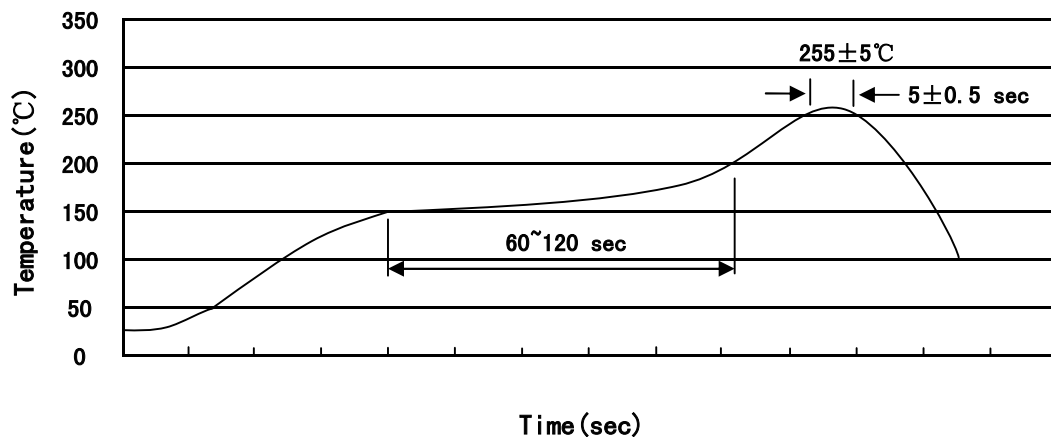
BR: Company Code

Q: Automobile halogen-free product Code

035N06S: Product Type Code

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

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



说明：

- 1、预热温度 150~200°C，时间 60~120sec；
- 2、峰值温度 255±5°C，时间持续为 5±0.5sec；
- 3、焊接制程冷却速度为 2~10°C/sec.

Note:

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

/ Resistance to Soldering Heat Test Conditions

温度：260±5°C

时间：10±1 sec.

Temp.:260±5

Time:10±1 sec

/ Packaging SPEC.

卷盘包装 / 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

套管包装 / 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