

/ Descriptions

TO-263 N

N-CHANNEL MOSFET in a TO-263 Plastic Package.

/ Features $V_{DS}=60V$ $I_D=182A$ $R_{DS(on)}@10V \hat{=} 3.0m_{\Omega}$ (Type.2.8m $_{\Omega}$) $R_{DS(on)}@6V \hat{=} 5.0m_{\Omega}$ (Type.3.5m $_{\Omega}$)

DHF0T 434

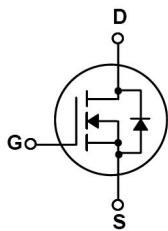
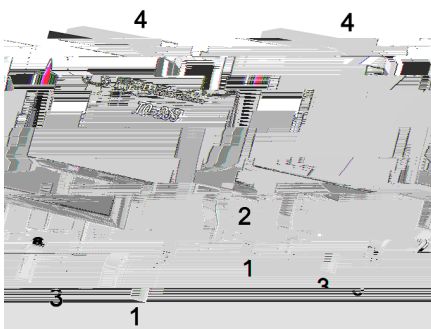
Qualified to AEC-Q101 Standards for High Reliability,

HF Product.

/ Applications

EPV

High frequency switching and synchronous rectification,BMS,Motor, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit**/ Pinning**

PIN1 G

PIN 2 4 D

PIN 3 S

/ Marking

See Marking Instructions.

BRCS030N06SHBDQ

Rev.A Dec.-2024



蓝箭电子
BLUE ROCKET ELECTRONICS

DATA SHEET

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	60	V
Drain Current	$I_D(T_c=25^\circ\text{C})$	182	A
Pulsed Drain Current	I_{DM}	530	A
Gate-Source Voltage	V_{GS}	± 20	V

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Turn-On Delay Time	$t_{d(on)}$	$V_{GS}=10V$ $V_{DS}=30V$ $R_L=1.5_{\Omega}$ $R_{GEN}=3_{\Omega}$		15.7		
Turn-On Rise Time	t_r			16.4		ns

/ Electrical Characteristic Curve

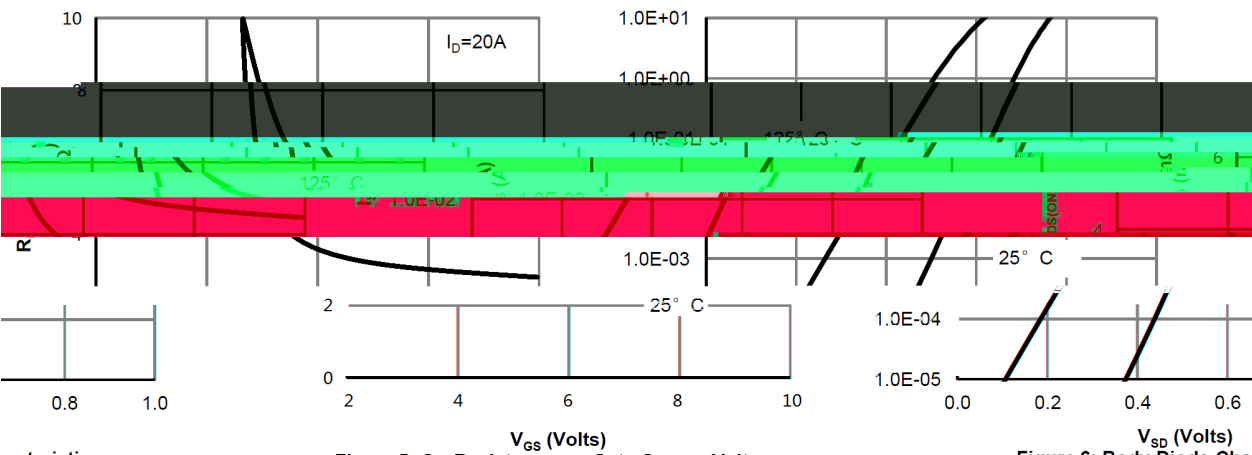
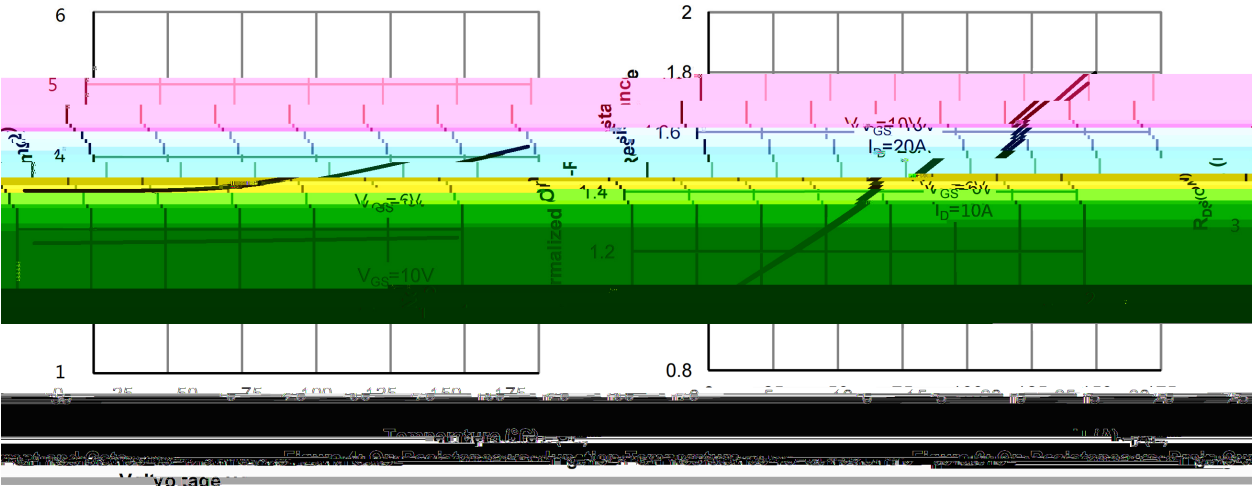
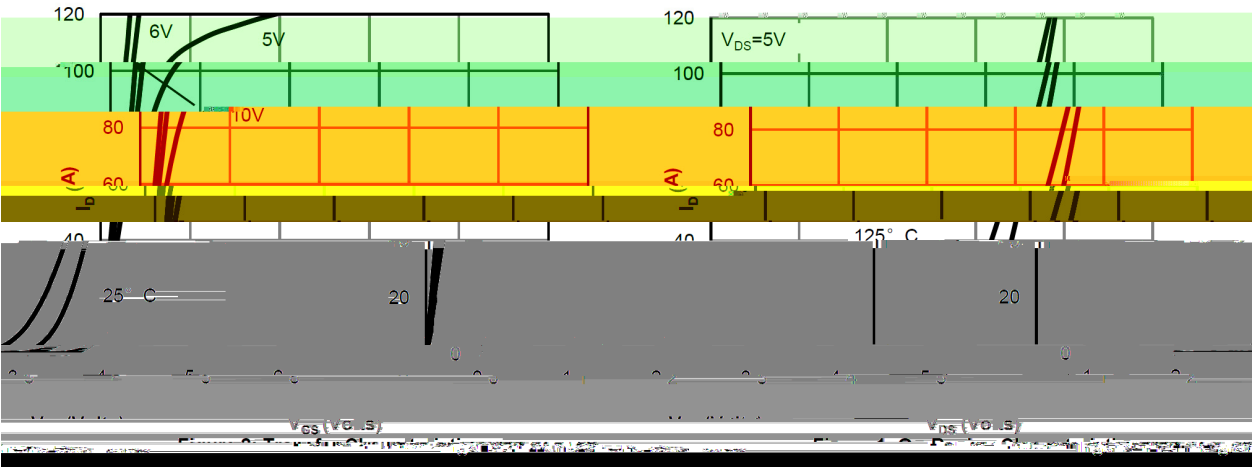
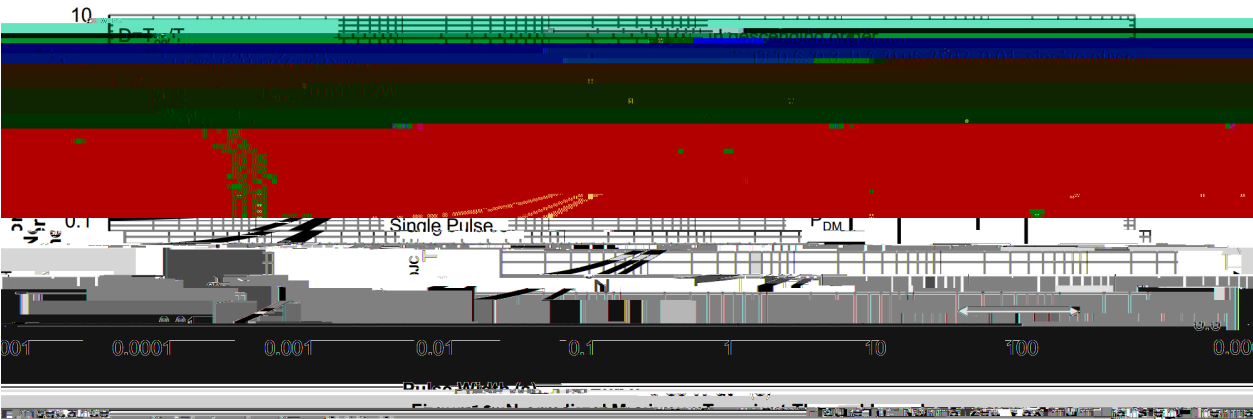
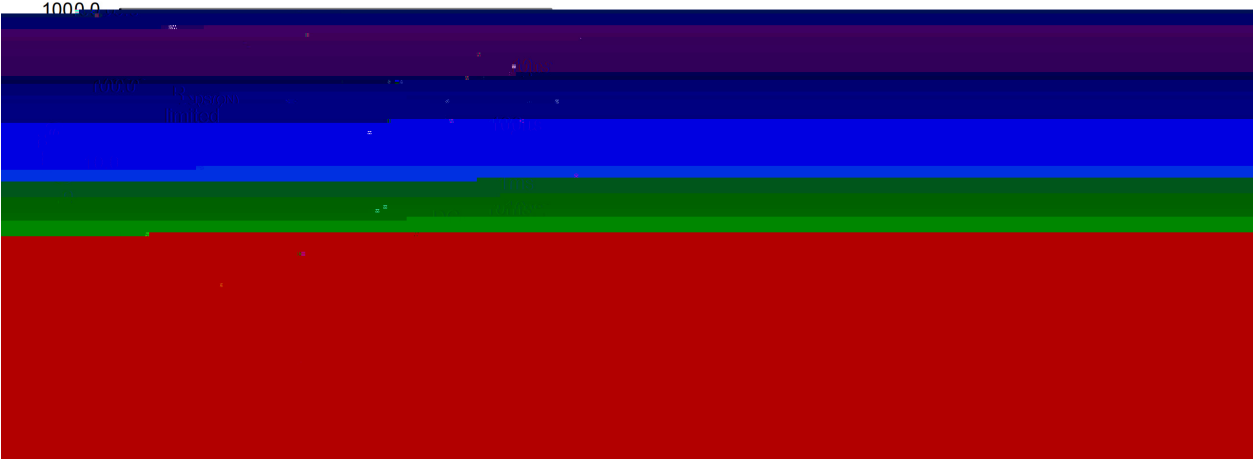
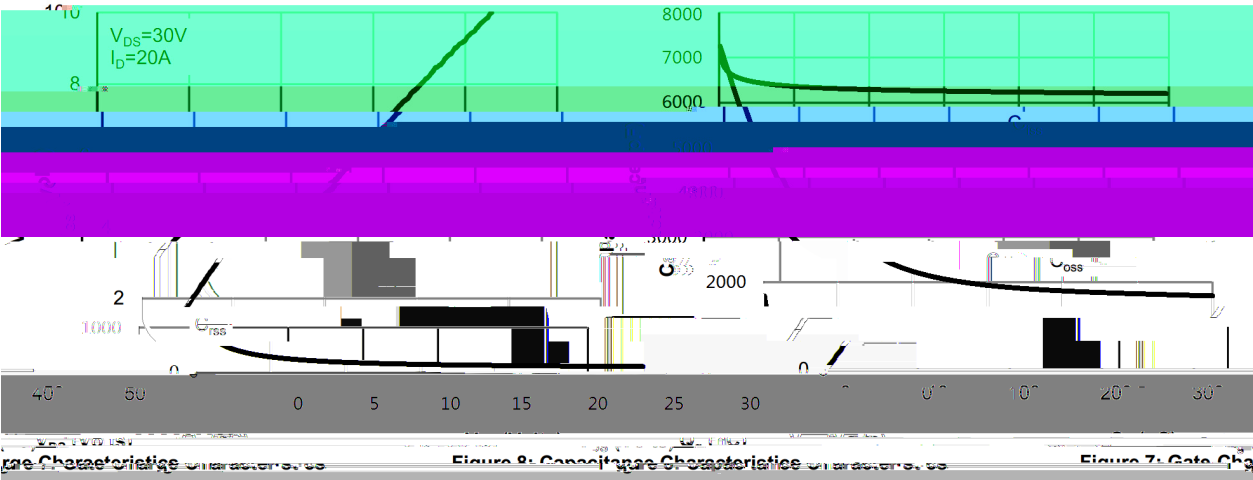
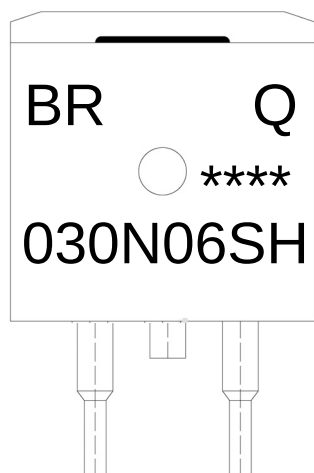


Figure 5: On-Resistance vs. Gate-Source Voltage Figure 6: Body-Diode Characteristics Figure 7: Power Dissipation vs. Temperature

/ Electrical Characteristic Curve



/ Marking Instructions



EU

Q

363Q39VK

Note:

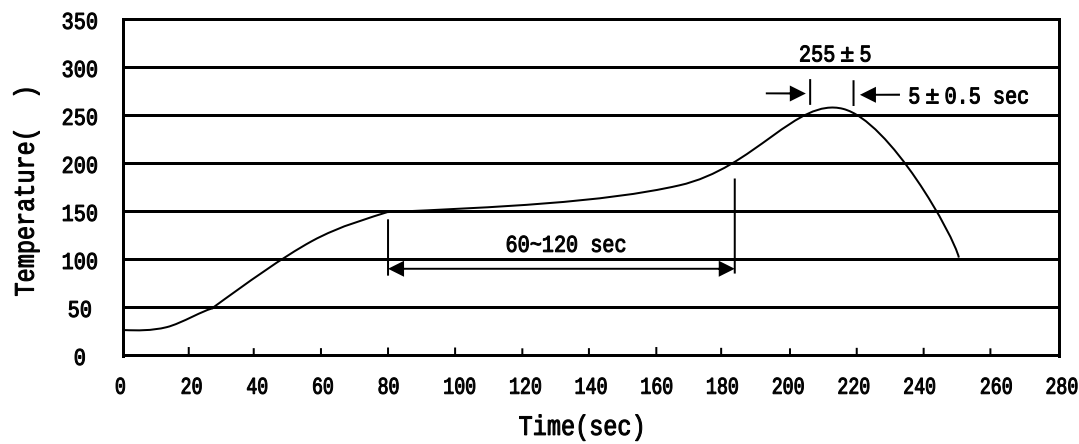
BR: Company Code

Q: Automobile halogen-free product Code

030N06SH: 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.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
TO-263	800	1	800	6	4,800	13 ×24	360×360×50	380×335×366

/ TUBE

Package Type	Units					Dimension (unit mm ³)		
	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Tube	Inner Box	Outer Box
TO-263	50	20	1,000	5	5,000	532×33×7.0	555×164×50	575×290×180

/ Notices