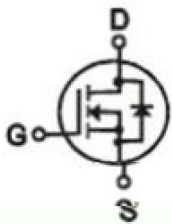


Rev.C Jan.-2026

LFPAK5×6 N
 N-Channel MOSFET in a LFPAK5×6 Plastic Package.

$V_{DS} (V) = 30V$ $I_D = 300A$
 $R_{DS(ON)}@10V$ 0.55mΩ(Typ. 0.48mΩ)
 $R_{DS(ON)}@4.5V$ 0.95mΩ(Typ. 0.82mΩ)
 HF Product.

DC-DC
 Motor drivers, DC - DC Converter.

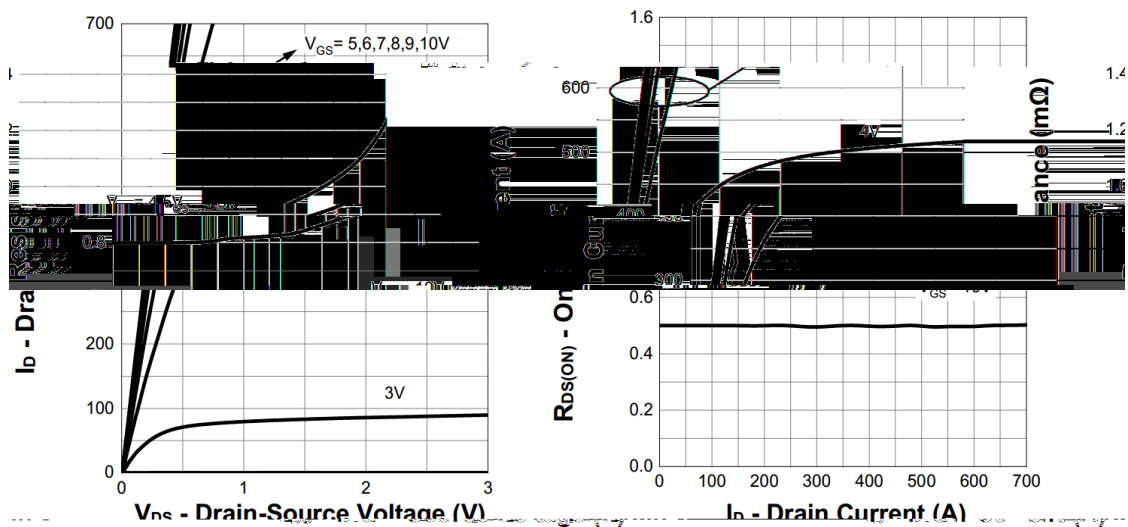
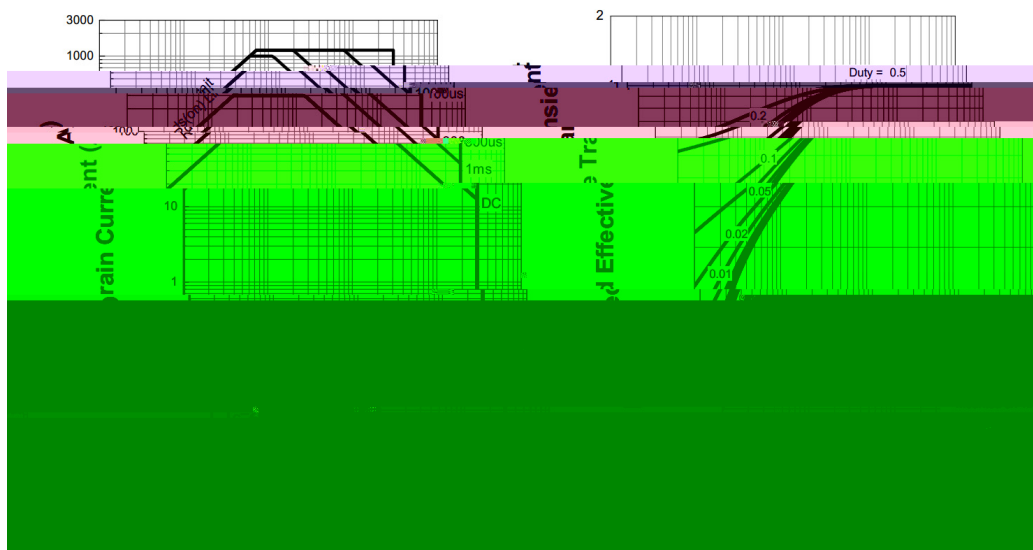
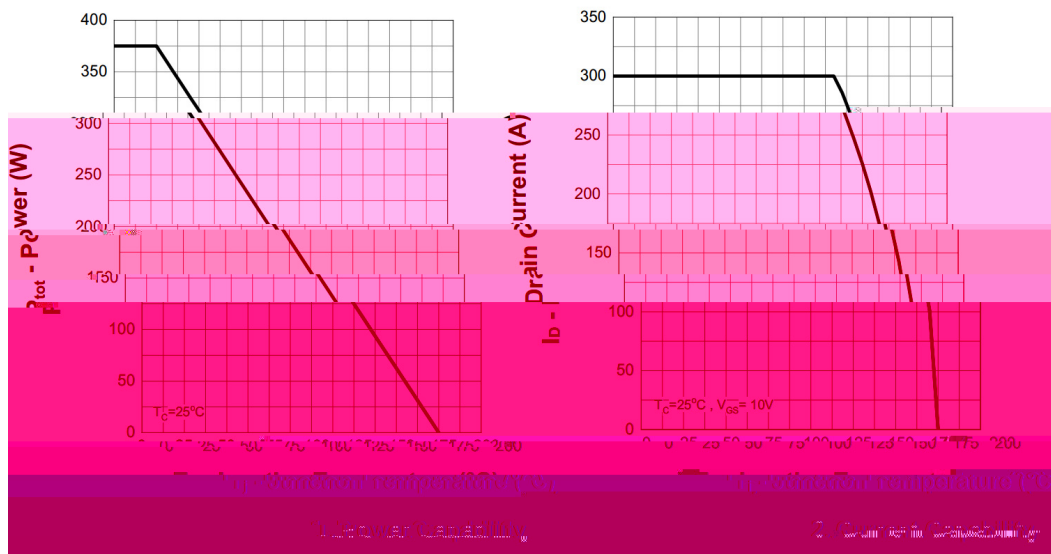


PIN1 2 3 S PIN4 G Tab D

See Marking Instructions.

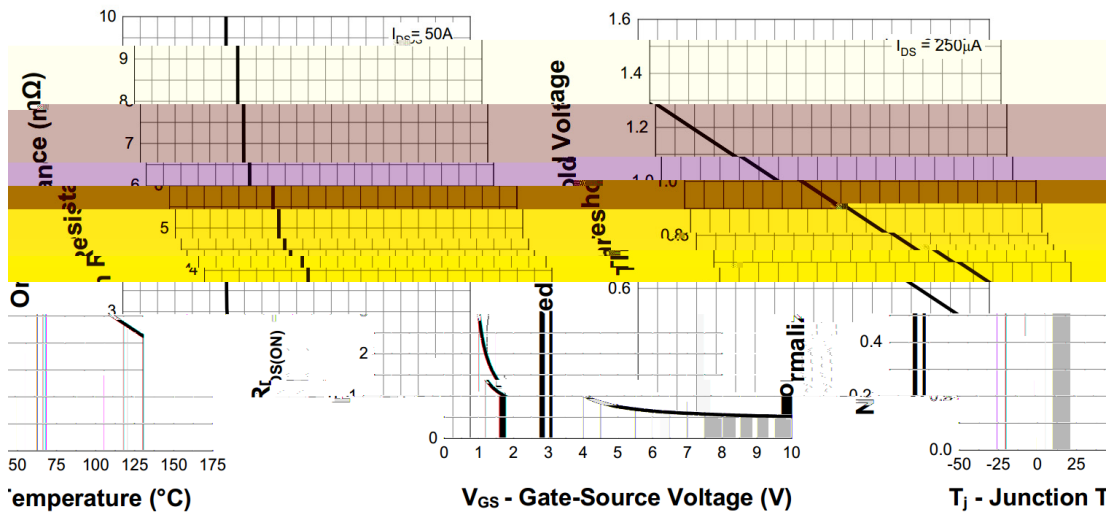
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	30	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	300	A
	$I_D(T_C=100^\circ\text{C})$	300	A
Pulsed Drain Current	I_{DM}	1200	A
Gate-Source Voltage	V_{GS}	20	V
Single Pulsed Avalanche Energy $L=1.0\text{mH}$	E_{AS}	1624	mJ
Continuous-Source Current	I_S	300	A
Total Power Dissipation	$P_D(T_C=25^\circ\text{C})$	375	W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 175	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	Q_g	$V_{GS}=10V, \quad V_{DS}=15V,$ $I_D=50A$		306		nC
Gate Source Charge	Q_{gs}			63		
Gate Drain Charge	Q_{gd}			44		
Turn-On Delay Time	$t_{d(on)}$	$V_{GEN}=10V \quad V_{DS}=15V$ $R_L=0.3\Omega \quad R_G=3.9\Omega$ $I_{DS}=50A$		23		ns
Turn-On Rise Time	t_r			151		
Turn-Off Delay Time	$t_{d(off)}$			249		
Turn-Off Fall Time	t_f			127		



5. Output Characteristics

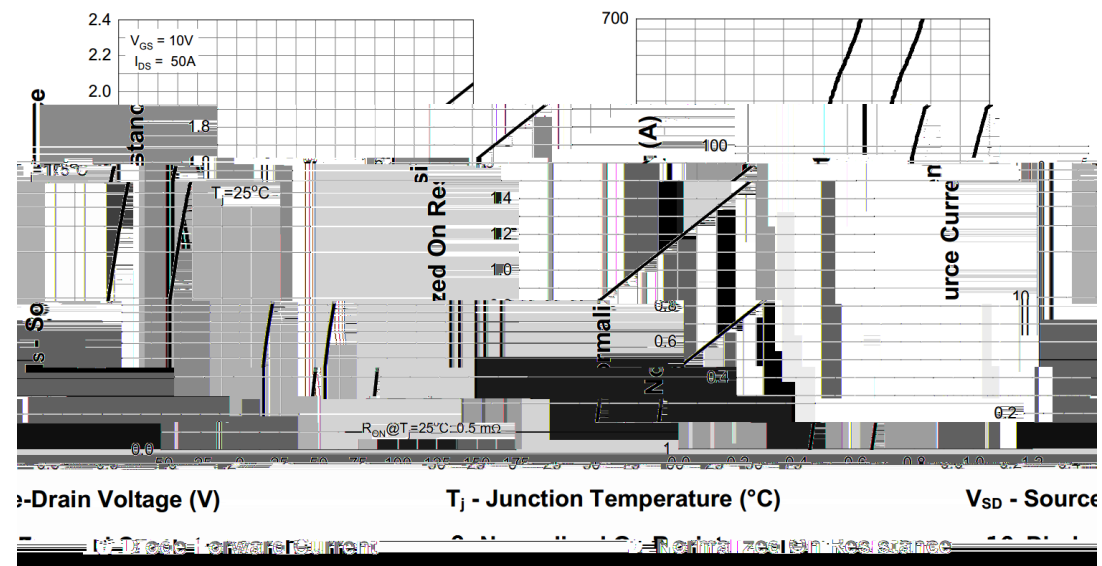
6. On Resistance



Threshold Voltage

7. Transfer Characteristics

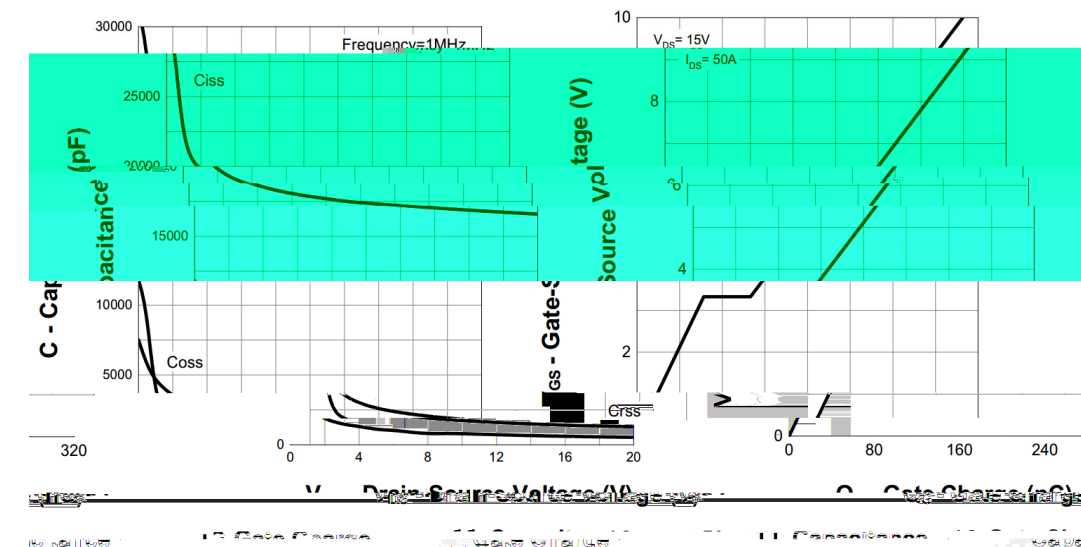
8. Normalized

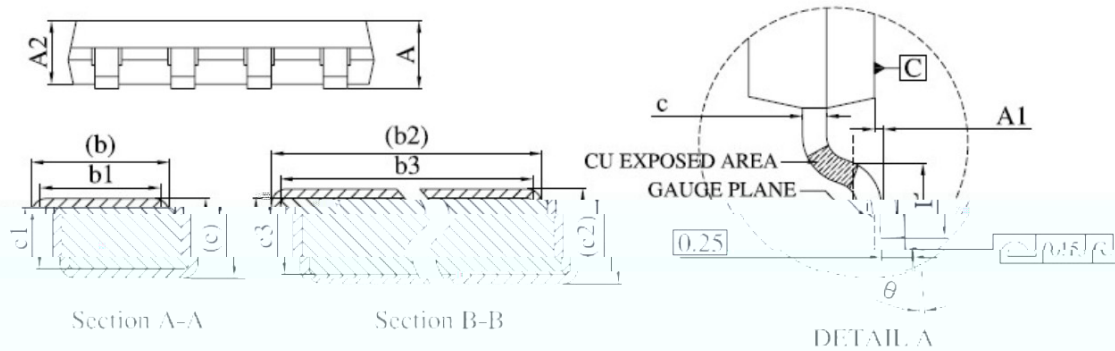
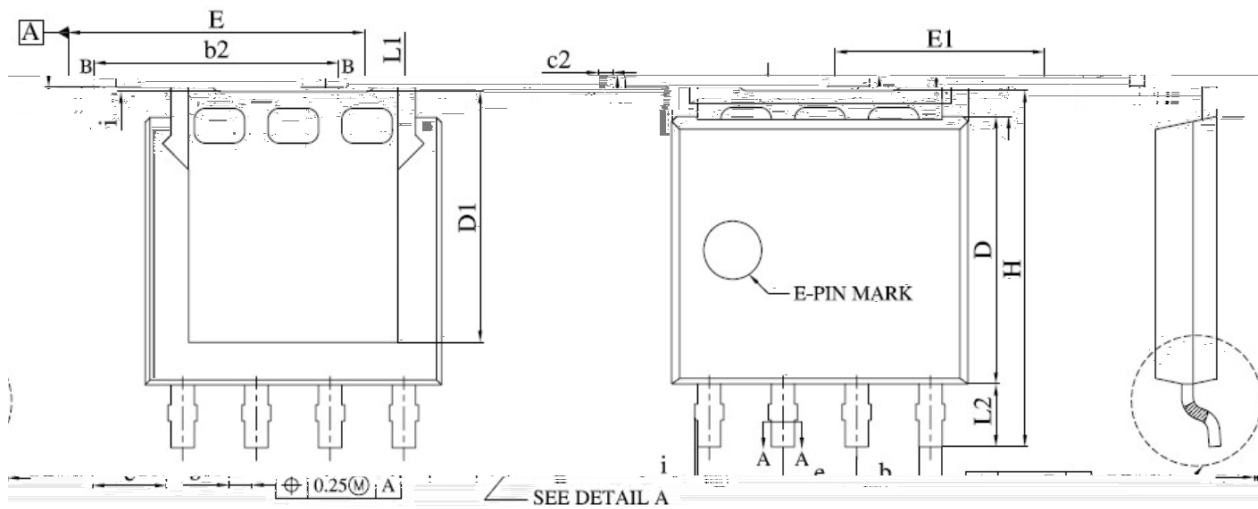


Drain Current

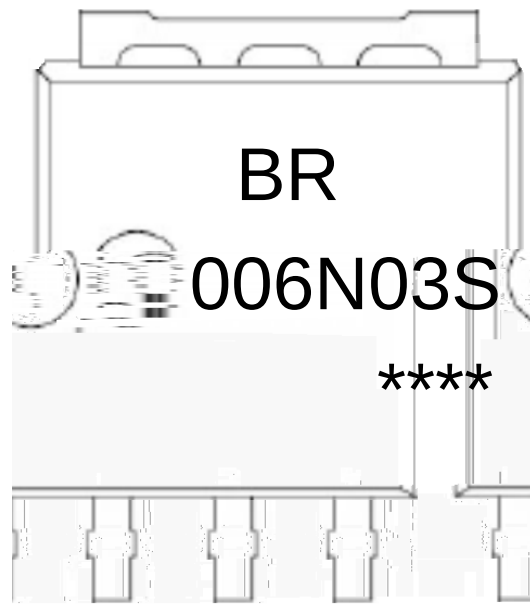
T_j - Junction Temperature (°C)

V_{DS} - Source





Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	MIN.	MAX.		MIN.	MAX.
A	1.00	1.30	E	4.95	5.20
A1	0.00	0.15	E1	3.50	3.75
A2	0.98	1.12	e	1.27 BSC.	
b	0.35	0.50	H	5.95	6.00
b1	0.32	0.46	i	-	0.00
b2	4.02	4.41	L	0.40	0.45
b3	4.00	4.37	L1	0.27	0.30
c	0.19	0.25	L2	0.80	0.85
c1	0.17	0.23	theta	0°	0°
c2	0.24	0.30			
c3	0.22	0.28			
D	4.45	4.70			
D1	-	4.45			



006N03S

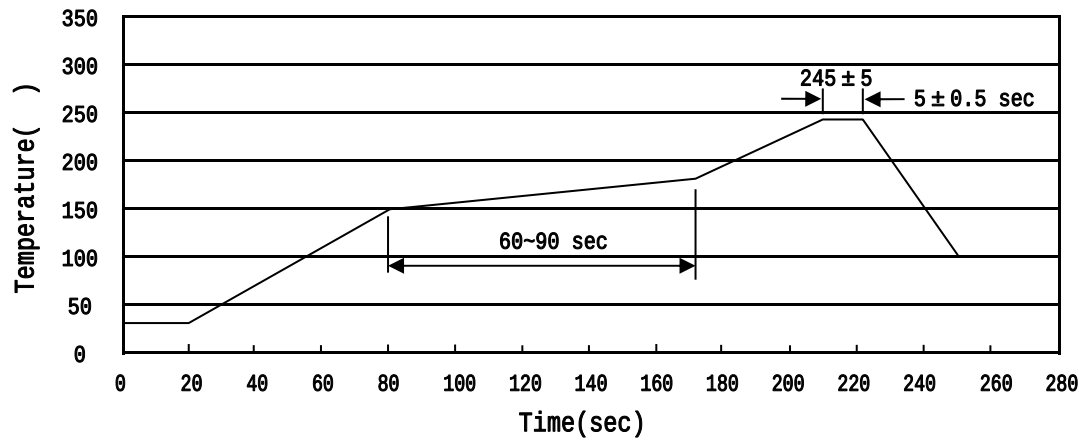
Note

BR: Company Code

006N03S: Product Type Code

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

Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-----|-----|----|-------------|--|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 °C , Time:60~90sec. |
| 2 | 245 | 5 | | 5 ± 0.5sec; | 2.Peak Temp.:245 ± 5 °C , Duration:5 ± 0.5sec. |
| 3 | | | 2 | 10 °C/sec. | 3. Cooling Speed: 2~10 °C/sec. |

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

/ 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
LFPAK5×6	3,000	2	6,000	5	30,000	13"×12	356×335×50	385×285×358

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
LFPAK5×6	5,000	2	10,000	5	50,000	13"×12	356×335×50	385×285×358

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