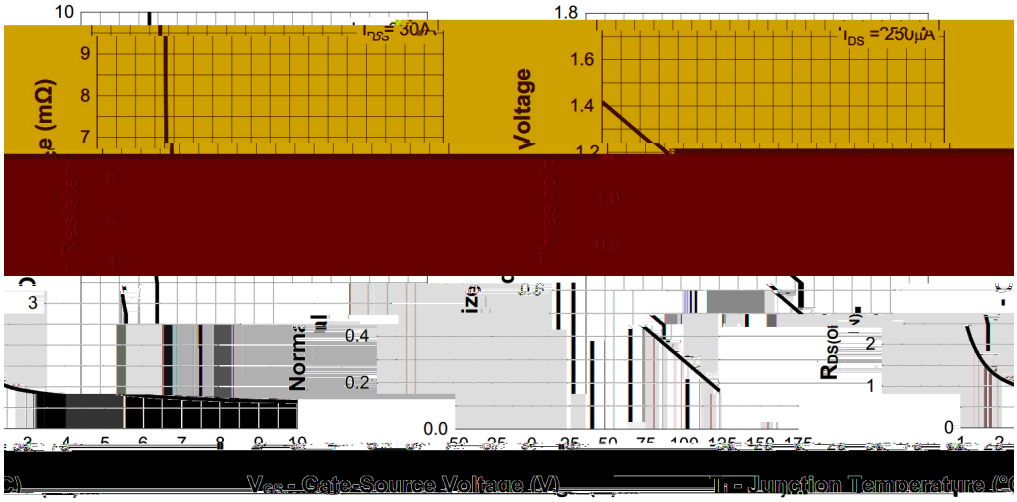
Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	60	V
Drain Current	I_D(Tc=25)	300	A
	I_D(Tc=100)	300	A
Pulsed Drain Current	I_{DM}	1200	A
Gate-Source Voltage	V_{GS}	± 20	V
Single Pulsed Avalanche Energy L=1.0mH	E_{AS}	1000	mJ
Continuous-Source Current	I_S	300	A
Total Power Dissipation	P_D(Tc=25)	375	W
Junction and Storage Temperature Range	T_J,T_{STG}	-55 to 175	℃
Thermal Resistance-Junction to Ambient	$R_{\theta JA}$	60	/W
Thermal Resistance-Junction to Case	$R_{\theta JC}$	0.4	

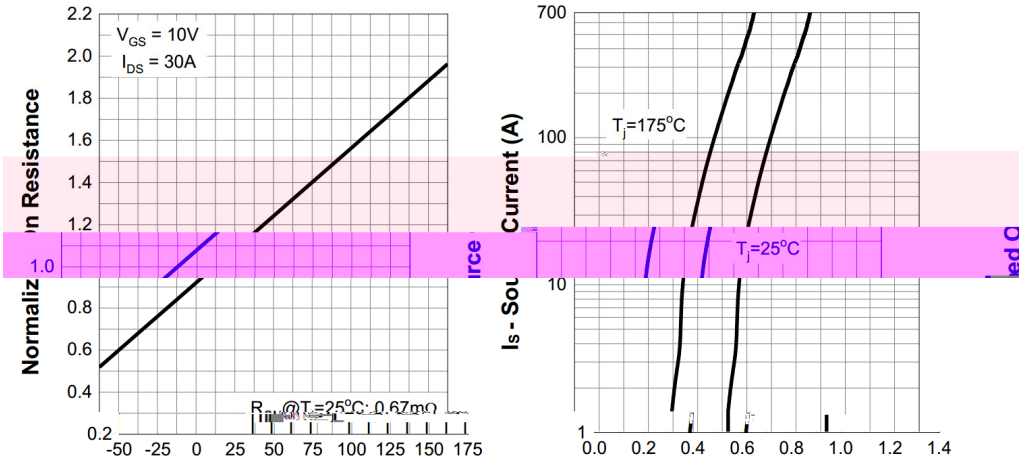
Notes:
① Surface Mounted on 1 in^2 pad area, t ≤ 10 sec
② Pulse width ≤ 300 μs, duty cycle ≤ 2 %
③ Limited by bonding wire

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}=0V I_D=250μA	60			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=48V V_{GS}=0V			1	μA
Gate-Body Leakage Current Forward	I_{GSS}	V_{GS}=±20V V_{DS}=0V			± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}=V_{GS} I_D=250μA	1		2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	V_{GS}=10V I_D=30A		0.67	0.75	mΩ
	$R_{DS(on)}$	V_{GS}=4.5V I_D=20A		1.10	1.25	mΩ
Drain-Source Diode Forward Voltage	V_{SD}	V_{GS}=0V I_S=30A			1.3	V
Reverse Recovery Time	trr	I_{DS} = 30 A, V_{GS} = 0 V dIsD/dt = 100 A/μs		85		nS
Reverse Recovery Charge	Qrr			120		nC
Input Capacitance	C_{iss}	V_{DS}=30V V_{GS}=0V f=1.0MHz		7204		pF
Output Capacitance	C_{oss}			2154		
Reverse Transfer Capacitance	C_{rss}			249		

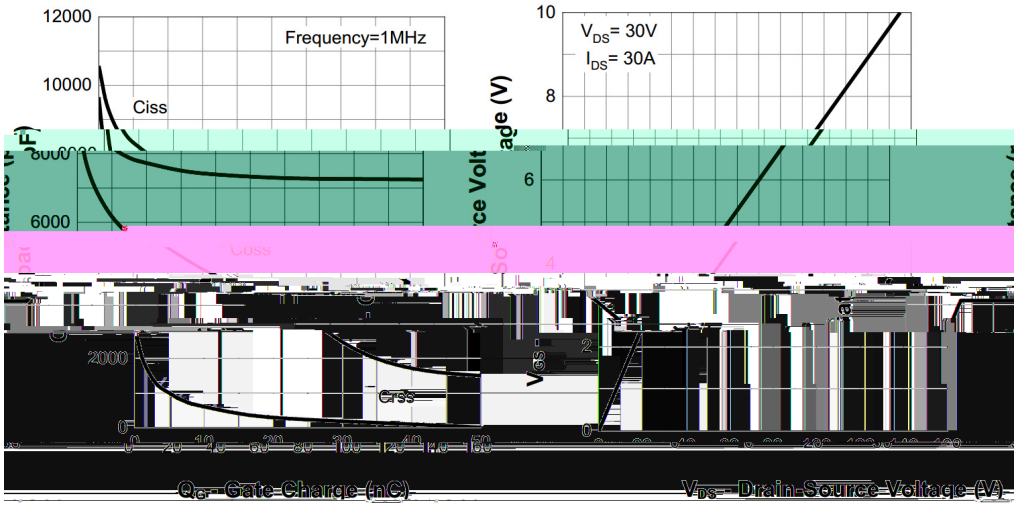
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Total Gate Charge	Q_g	V_{GS}=10V, V_{DS}=30V, I_D=30A		155		nC



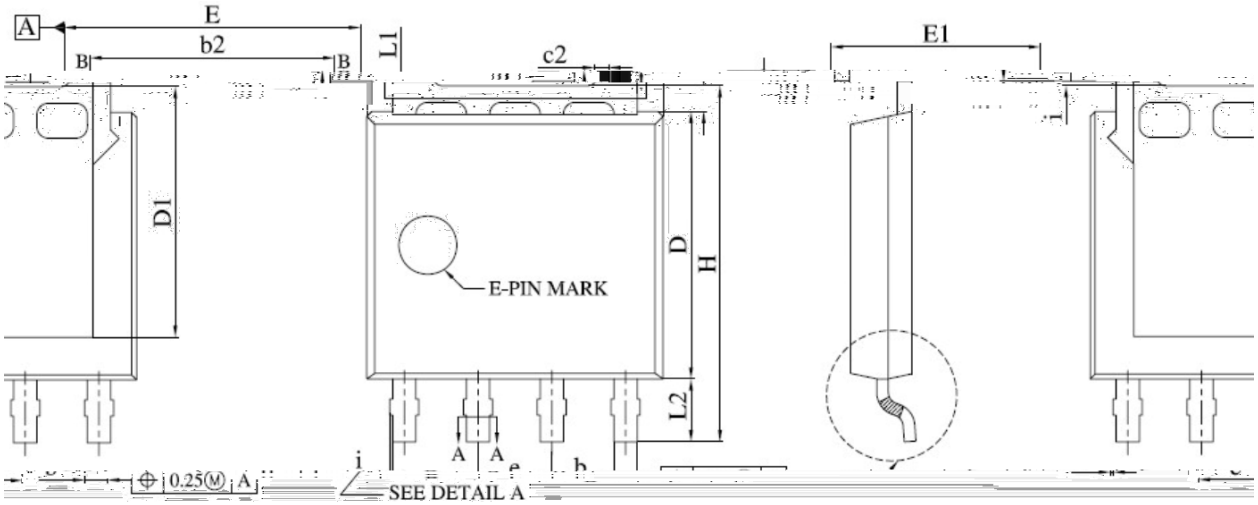
old Voltage 7. Transfer Characteristics 8. Normalized Thresho

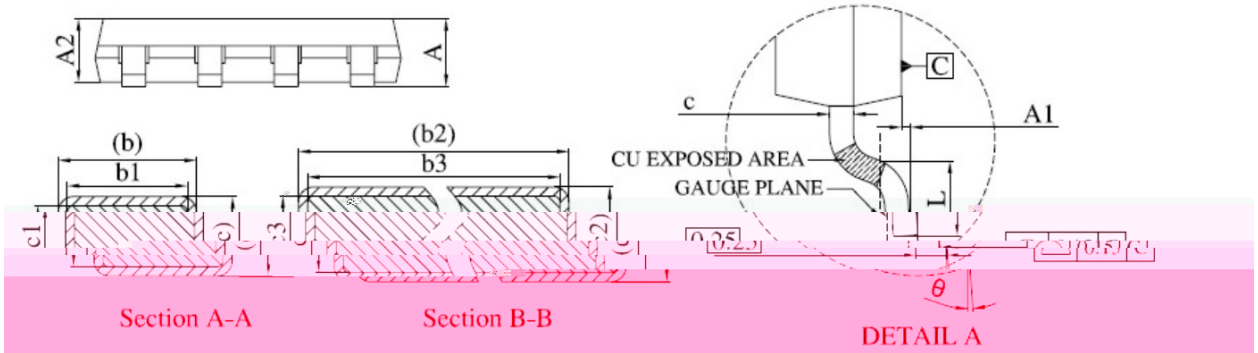


9. Normalized On Resistance 10. Diode Forward Current



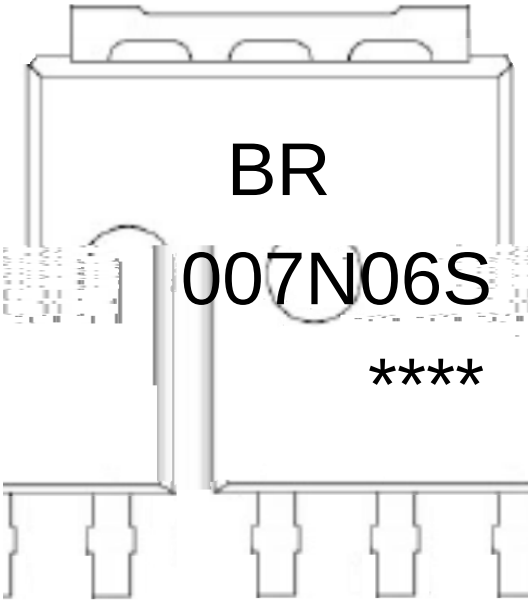
12. Gate Charge 11. Capacitance





Symbol	Dimensions In Millimeters MIN.	MAX.
A	1.00	1.30
A1	0.00	0.15
A2	0.98	1.12
b	0.35	0.50
b1	0.32	0.46
b2	4.02	4.41
b3	4.00	4.37
c	0.19	0.25
c1	0.17	0.23
c2	0.24	0.30
D	4.45	4.70
D1	-	4.45

Symbol	Dimensions In Millimeters MIN.	MAX.
E	4.95	5.30
E1	3.50	3.70
e	1.27 BSC.	
H	5.95	6.25
i	-	0.25
L	0.40	0.85
L1	0.27	0.57
L2	0.80	1.30
θ	0°	8°



BR

007N06S

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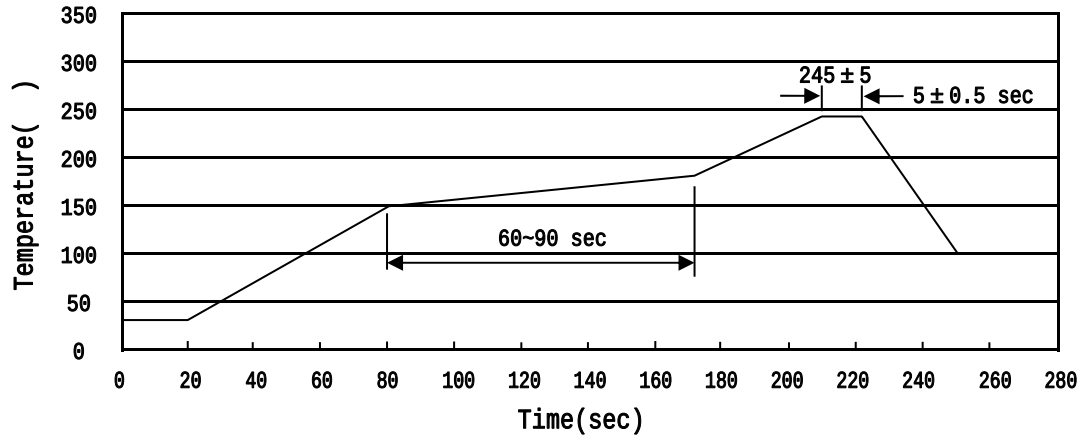
Note

BR:	Company Code
007N06S:	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;

2 245±5 5±0.5sec;

3 2 10 /sec.

1.Preheating:150~180 , Time:60~90sec.

2.Peak Temp.:245±5 , Duration:5±0.5sec.

3. Cooling Speed: 2~10 /sec.

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

/ REEL

Package Type	Units					Dimension		(unit mm³)
	/	/	/	/	/			
LFPAK5×6	3,000	2	6,000	5	30,000	13''×12	356×335×50	385×285×358

Package Type	Units					Dimension		(unit mm³)
	/	/	/	/	/			
LFPAK5×6	5,000	2	10,000	5	50,000	13''×12	356×335×50	385×285×358