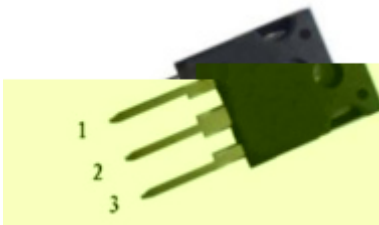
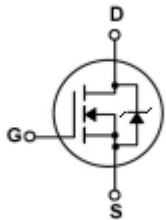


TO-247 N N-CHANNEL MOSFET in a TO-247 Plastic Package.

Low gate charge minimize switching loss and fast recovery body diode.HF Product.

DC/DC UPS

These devices are well suited for high efficiency switching DC/DC converters,Synchronous rectification and UPS inverter.

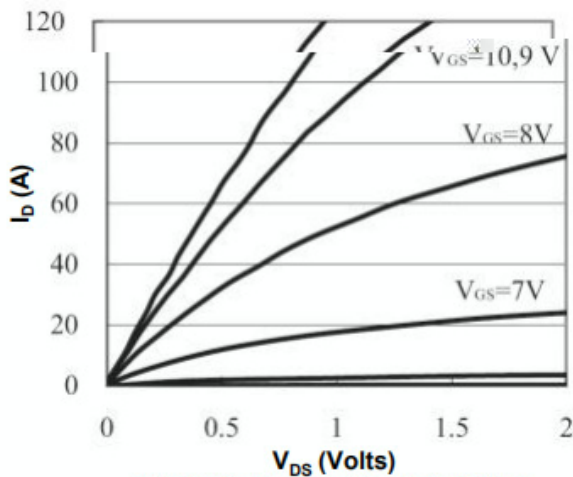
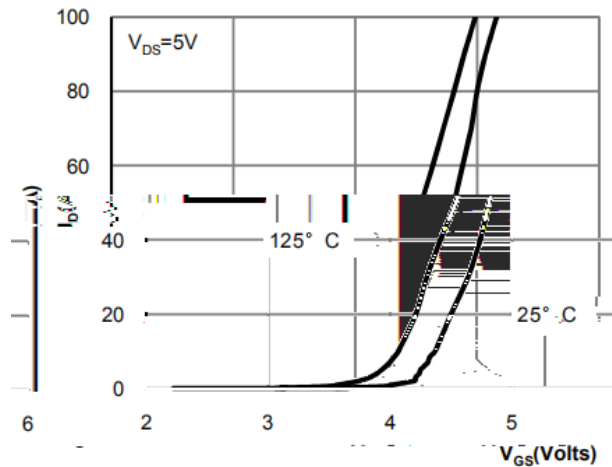
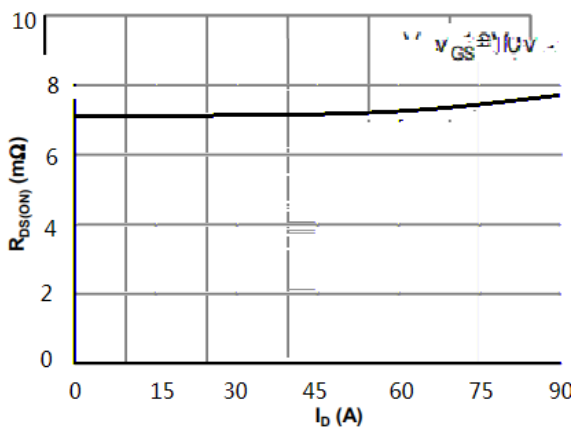
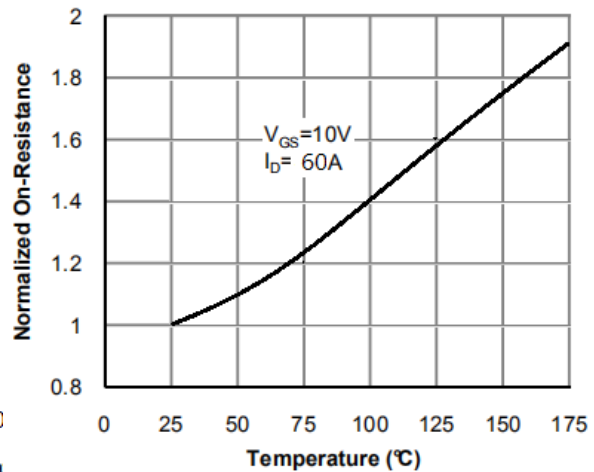
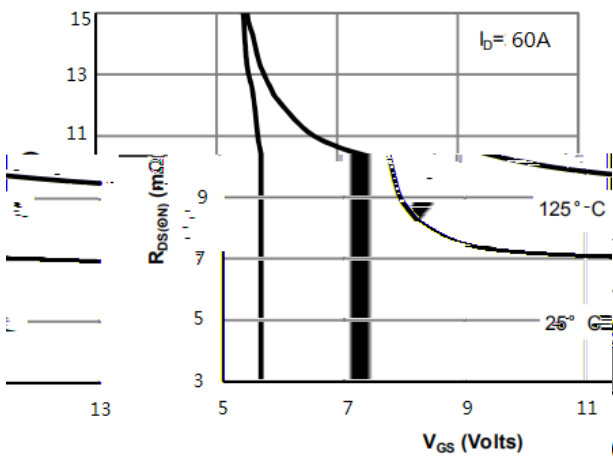
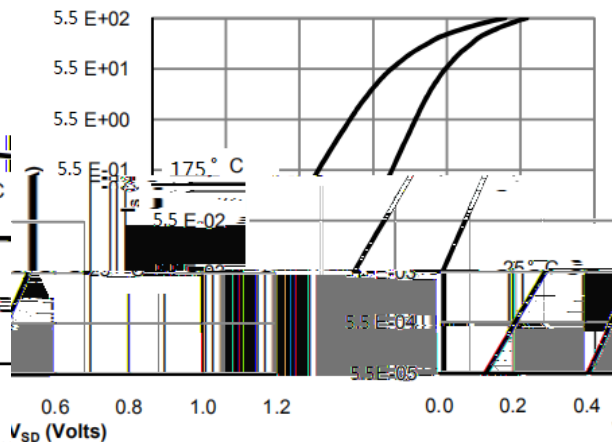


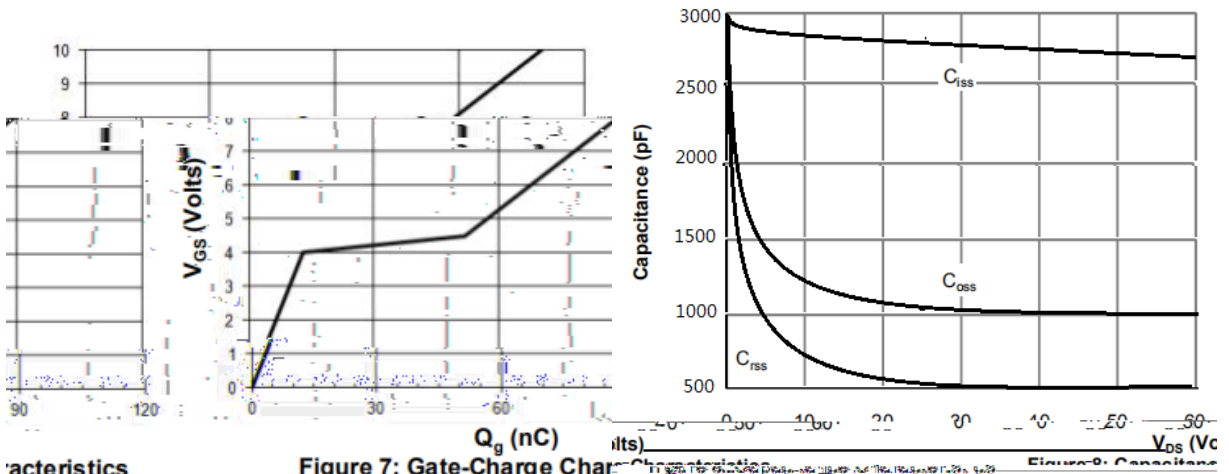
PIN1 G PIN 2 D PIN 3 S

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	60	V
Drain Current	$I_D(T_C=25^\circ\text{C})$	120	A
	$I_D(T_C=100^\circ\text{C})$	88	A
Pulsed Drain Current	I_{DM}	480	A
Gate-Source Voltage	V_{GSS}	± 20	V
Avalanche Current	I_{AR}	76.7	A
Avalanche energy L=0.5mH	E_{AS}	1200	mJ
Total Power Dissipation	$P_D(T_C=25^\circ\text{C})$	300	W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 175	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Zero Gate Voltage Drain Current	BV_{DSS}	$V_{GS}=0V$ $I_D=250\mu A$	60	66		V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=60V$ $V_{GS}=0V$			1	μA
Gate-Body Leakage Current Forward	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			± 0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	2		4	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=60A$		7	8	m Ω
Forward Transconductance	g_{FS}	$V_{DS}=10V$ $I_D=60A$	60			S
Forward On Voltage	V_{SD}	$V_{GS}=0V$ $I_S=60A$			1.3	V
Input Capacitance	C_{iss}	$V_{DS}=25V$ $V_{GS}=0V$ $f=1MHz$		2800		pF
Output Capacitance	C_{oss}			1030		
Reverse Transfer Capacitance	C_{rss}			520		
Total Gate Charge	Q_g	$V_{DD}=30V$ $I_D=60A$ $V_{GS}=0V-10V$		110		nC
Gate-Source charge	Q_{gs}			13		
Gate-Drain charge	Q_{gd}			52		
Gate Series Resistor	R_g	$f=1.0MHz$		0.8		
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=30V$ $I_D=60A$ $V_{GS}=10V$ $R_G=2.5\Omega$		23		ns
Turn-On Rise Time	t_r			38		
Turn-Off Delay Time	$t_{d(off)}$			54		
Turn-Off Fall Time	t_f			26		

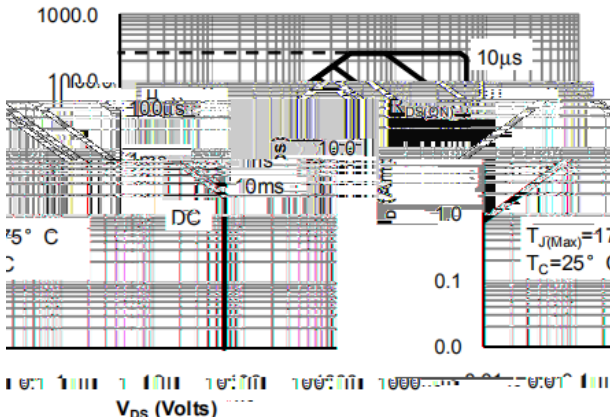

Fig 1: On-Region Characteristics

Figure 2: On-Region Characteristics vs. Temperature

Figure 3: On-Resistance vs. Drain Current and Gate Voltage

Figure 4: On-Resistance vs. Junction Temperature

Figure 5: On-Resistance vs. Gate-Source Voltage

Figure 6: Body Diode Characteristics



Characteristics

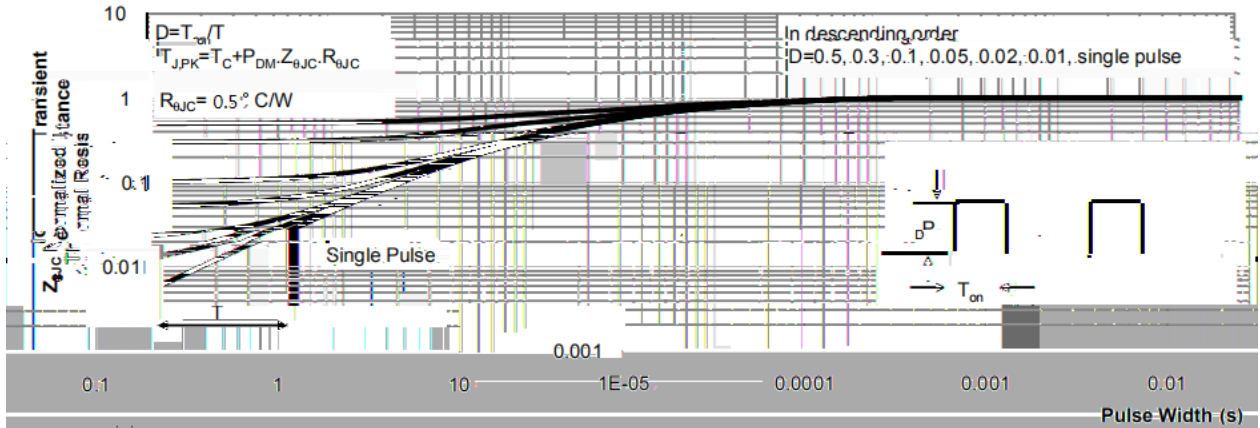
Figure 7: Gate-Charge Characteristics

Figure 8: Capacitance Characteristics



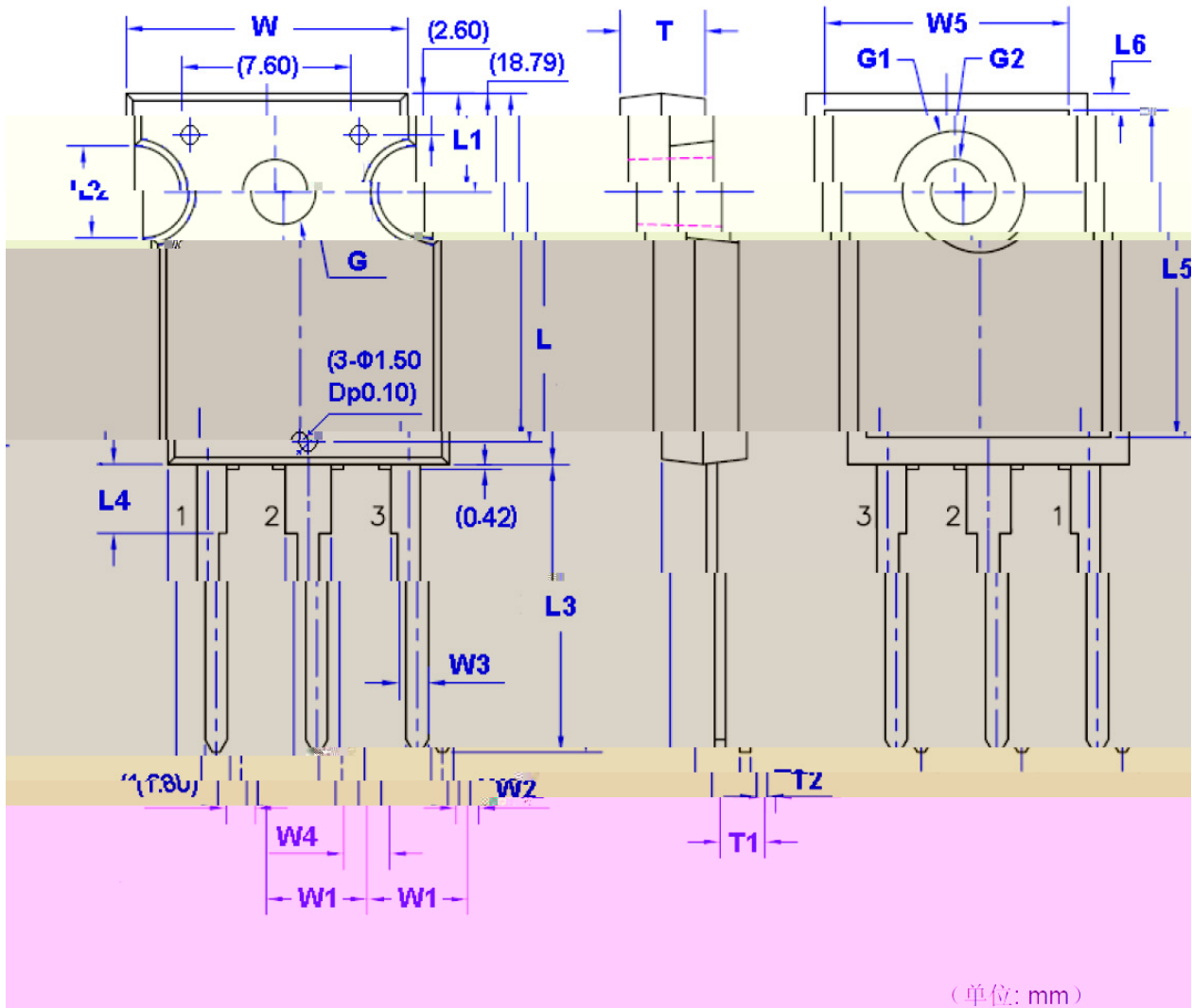
Maximum Forward Biased Safe Operating Area

Figure 9:



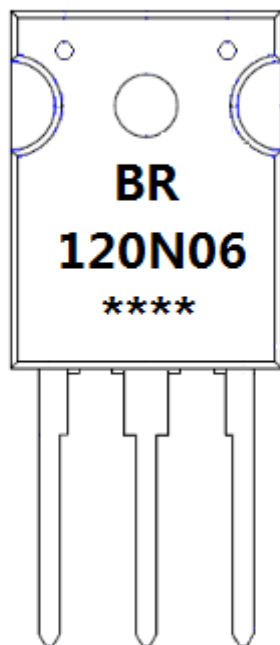
Thermal Impedance

Figure 10 : Normalized Maximum Transient Thermal Impedance



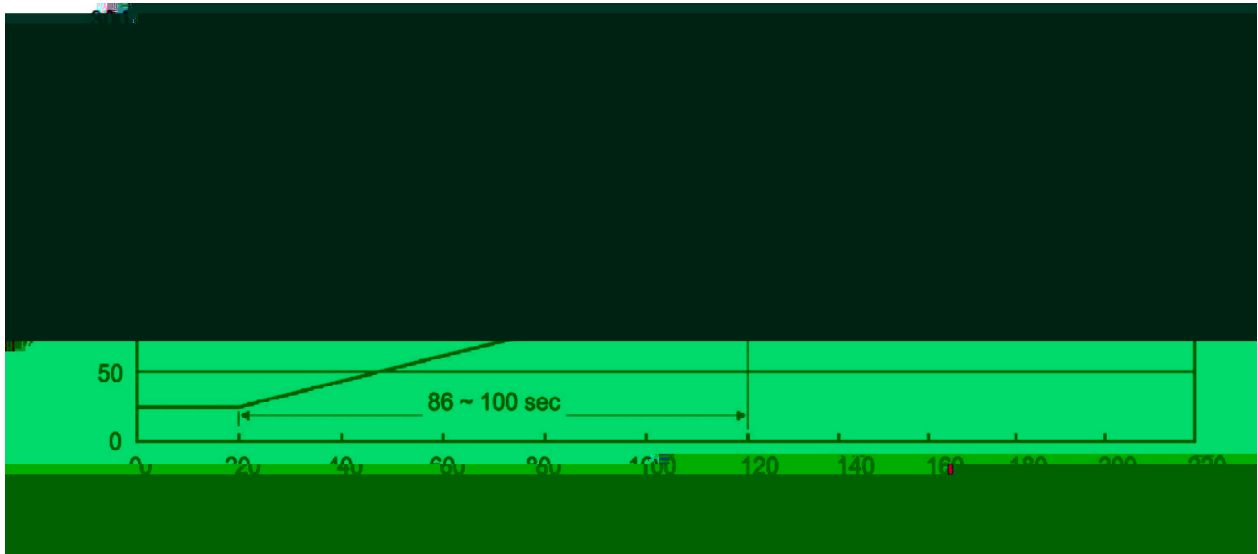
尺寸	尺寸		尺寸		尺寸		尺寸	尺寸	尺寸		
	Min	Max	Min	Max	Min	Max					
W	10.37	15.87	12.60	--	L4	3.69	3.93	L5	0.50	1.00	
W1	5.50	7.00	20.32	20.32	L5	1.30	--	G1(Φ)	3.51	3.51	
W2	1.17	1.35	1.17	5.34	5.58	L6	0.51	1.35	G2(Φ)	3.61	3.61
W3	1.53	1.77	L2	4.96	5.20	T	4.58	4.82	G2(Φ)	3.51	3.51
W4	2.42	2.66	L3	15.75	16.25	T1	2.29	2.66			

注: () 内数值为参考值。尺寸不包含毛刺及模具溢料。



BR
120N06

Note:
BR:


Note:

- | | | | | | |
|---|-------|-----|-----------|--------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 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. |

270±5

10±1 sec.

Temp.:270±5

Time:10±1 sec

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 套管	套管 盒	只 盒	盒 箱	只 箱	套管	盒	箱
								× ×