Drain-Source Breakdown Voltage	V_{GS} = 0 V,I_D = 100μA	1200	-	-
Drain-Source Leakage Current	V_{DS} = 1200 V, V_{GS} = 0 V	-	1	5
Gate Leakage Current	V_{GS} = 18 V, V_{DS} = 0 V	-	-	250
Gate-Source Threshold Voltage	V_{DS} = V_{GS} , I_D = 10 mA	2	2.6	4
	V_{DS} = V_{GS} , I_D = 10 mA T_J = 175	-	2	-
Drain-Source On-State Resistance	V_{GS} = 18 V, I_D = 40 A	-	37	50
	V_{GS} = 18 V, I_D = 40 A,T_J = 175	-	47	-
Internal Gate Resistance	f=1MHz	-	2.1	-
Input Capacitance		-	2975	-
Output Capacitance	V_{DS}=1000V V_{GS}=0V f=100kHz	-	119	-
Reverse Transfer Capacitance		-	12	-
Coss Stored Energy		-	175	-
Total Gate Charge(Note2)	I_D =40A V_{DD} =800V V_{GS} =-4/+ 18 V	t C		

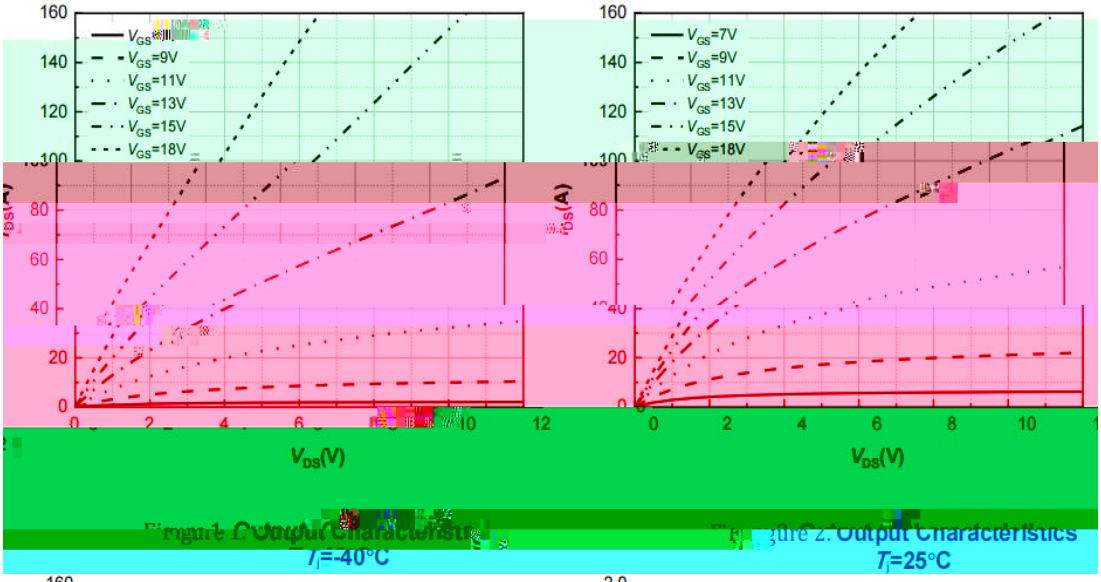


Figure 1. Output Characteristics
T_j=-40°C

Figure 2. Output Characteristics
T_j=25°C

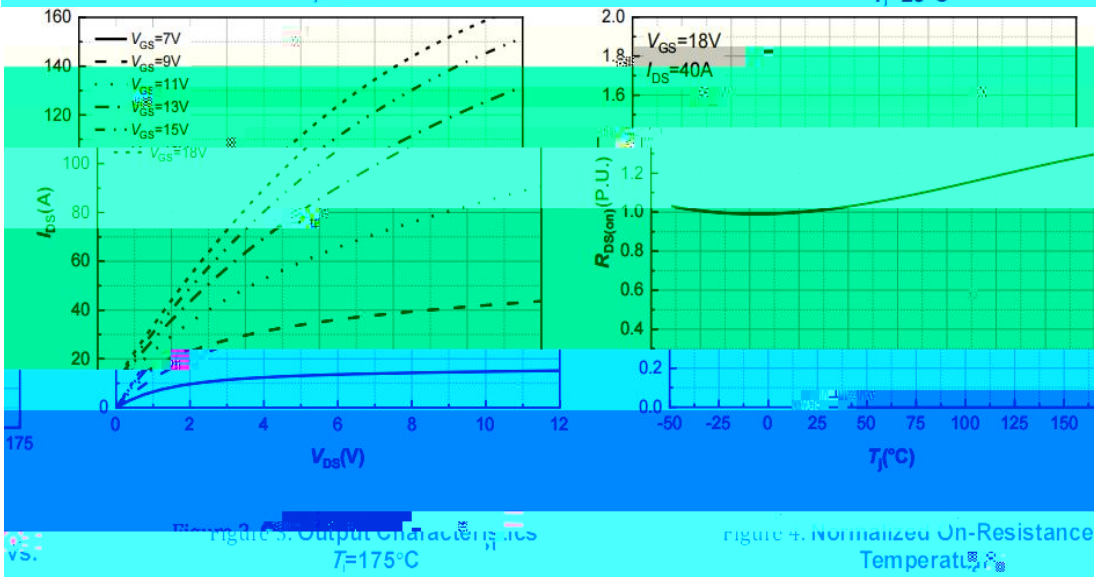
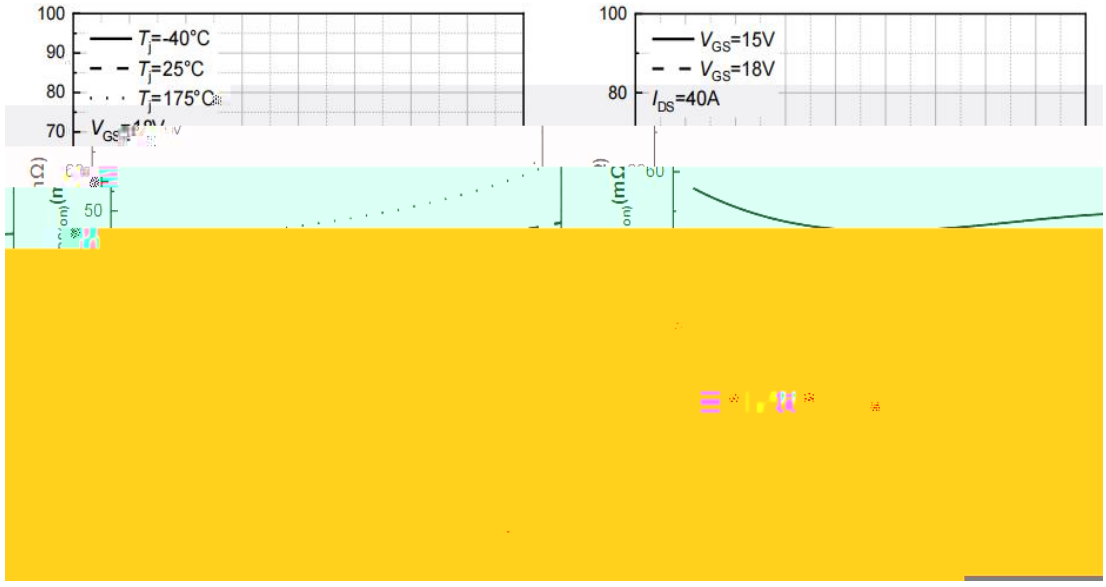


Figure 3. Output Characteristics
T_j=175°C

Figure 4. Normalized On-Resistance
Temperature



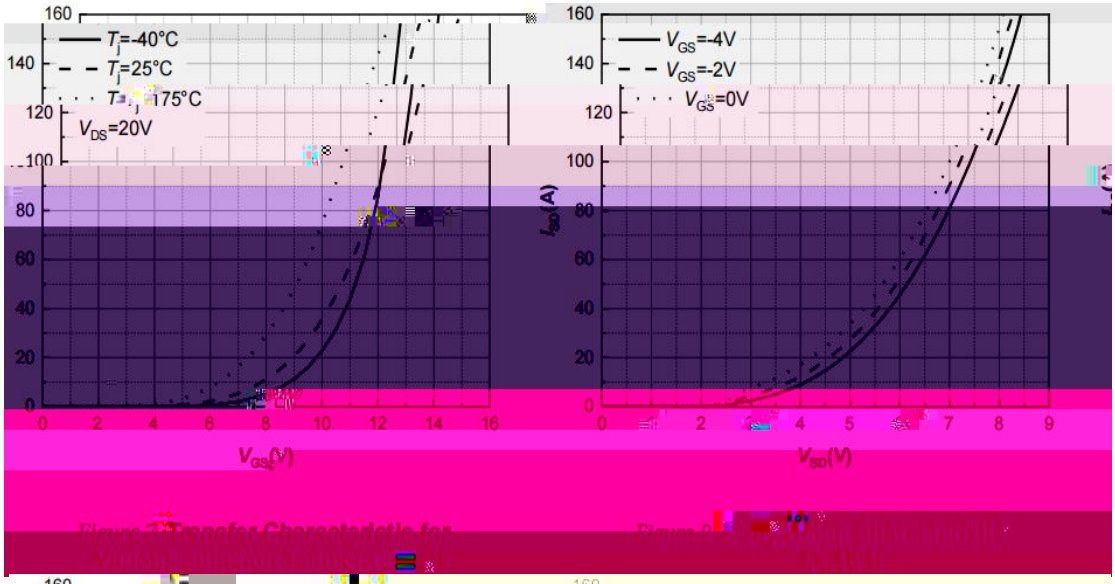


Figure 7. Transfer Characteristic for Various Junction Temperatures

Figure 8. Body Diode Characteristic at -40°C

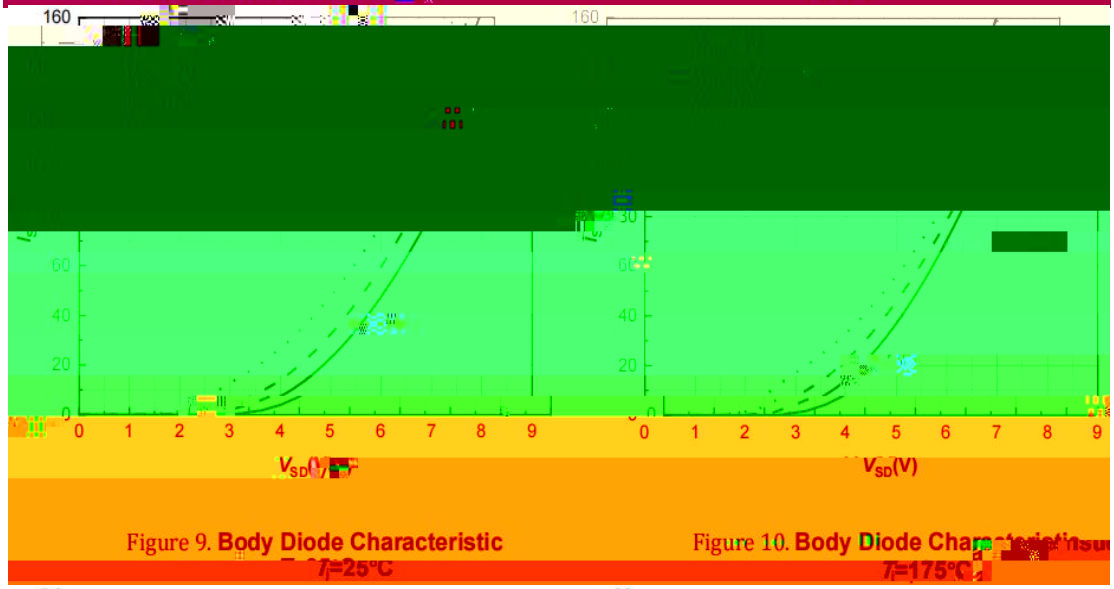


Figure 9. Body Diode Characteristic at T_j=25°C

Figure 10. Body Diode Characteristic at T_j=175°C

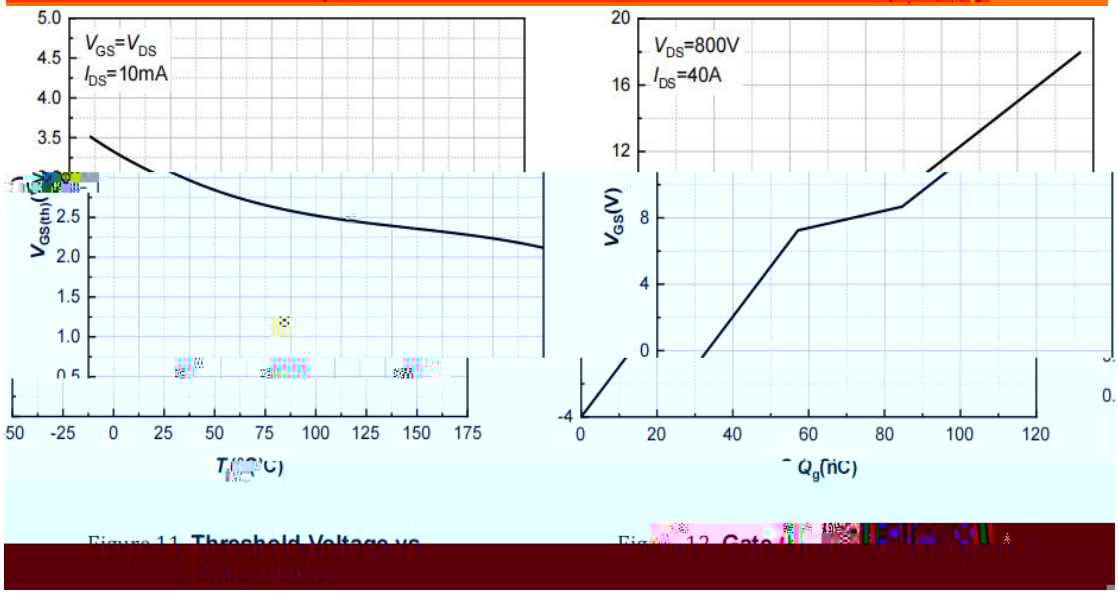
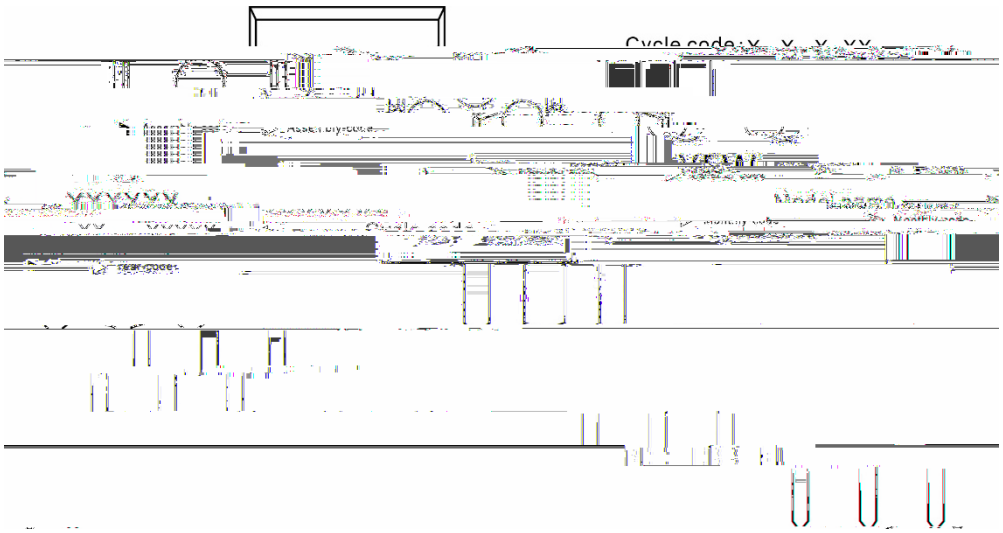


Figure 11. Threshold Voltage vs. Temperature

Figure 12. Gate Charge

Marking Diagram

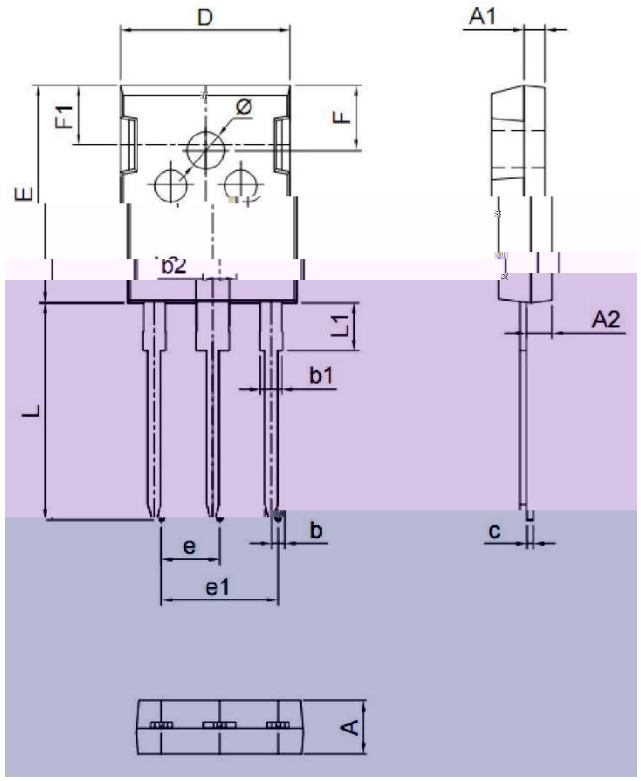


Ordering information

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
YFWM3040120APG3	TO-247	0.209oz(5.93g)	30pcs/tube	600PCS/Box 2400PCS/Carton

Package Dimensions

TO-247



Symbol	Dimensions in mm		Dimensions in Inch	
	Min.	Max.	Min.	Max.
A	4.90	5.10	0.193	0.201
A1	1.90	2.10	0.075	0.083
A2	2.29	2.54	0.090	0.100
b	1.00	1.40	0.039	0.055
b1	2.00	2.20	0.079	0.087
b2	3.00	3.20	0.118	0.126
c	0.50	0.70	0.020	0.028
D	15.75	16.05	0.620	0.632
E	20.20	20.80	0.795	0.819
e	5.45 (BSC)		0.215 (BSC)	
e1	10.90 (BSC)		0.429 (BSC)	
F	6.05	6.25	0.238	0.246
F1	5.80	6.00	0.228	0.236
L	20.10	20.40	0.791	0.803
L1	4.05	4.35	0.159	0.171
Φ	3.50	3.70	0.138	0.146