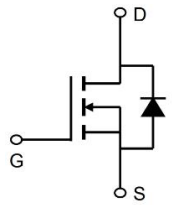
85V N-Channel Enhancement Mode MOSFET

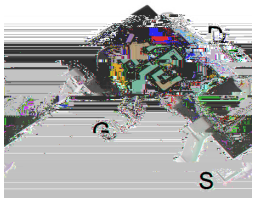
MAIN CHARACTERISTICS

I_D	
V_{DSS}	
R_{DSON}-typ(@V_{GS}=10V)	(Typ:4.1 mΩ)





TO-220C



TO-263C

APPLICATIONS

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- YFW-SGT technology

MECHANICAL DATA

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Maximum Ratings at Tc=25°C unless otherwise specified

Characteristics	Symbols	Value	Units
	V_{DS}		V
	V_{GS}		V
	I_D		A
	I_{DM}		A
	P_D		W
	E_{AS}		mJ
	T_J		°C
	T_{STG}		°C
	$R_{\theta JC}$		°C/W
	$R_{\theta JA}$		°C/W

Maximum Ratings at Tc=25°C unless otherwise specified

Characteristics	Test Condition	Symbols	Min	Typ	Max	Units
		BV_{DSS}				V
		I_{DSS}				μA
		I_{GSS}			±	nA
		$V_{GS(th)}$				V
		$R_{DS(ON)}$				mΩ
		g_{fs}				S
		R_G	-			Ω
		C_{iss}				pF
		C_{oss}				
		C_{rss}				
		Q_g				nC
		Q_{gs}				
		Q_{gd}				
		$t_{d(on)}$				ns
		T_r				
		$t_{d(OFF)}$				
		t_f				
		I_S				A
		V_{SD}				V
		t_{rr}				ns
		Q_{rr}				nC

Ratings and Characteristic Curves

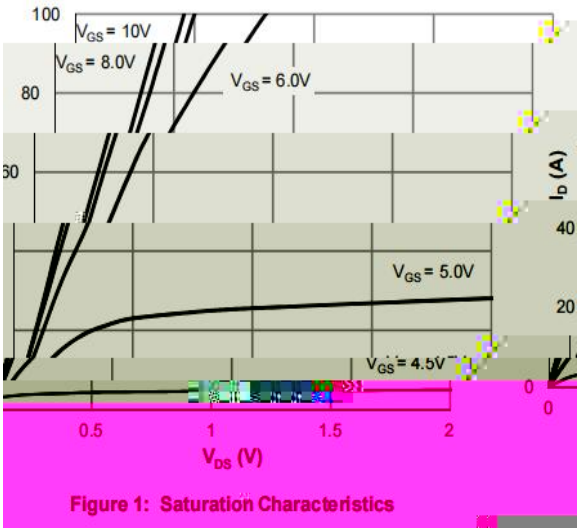


Figure 1: Saturation Characteristics

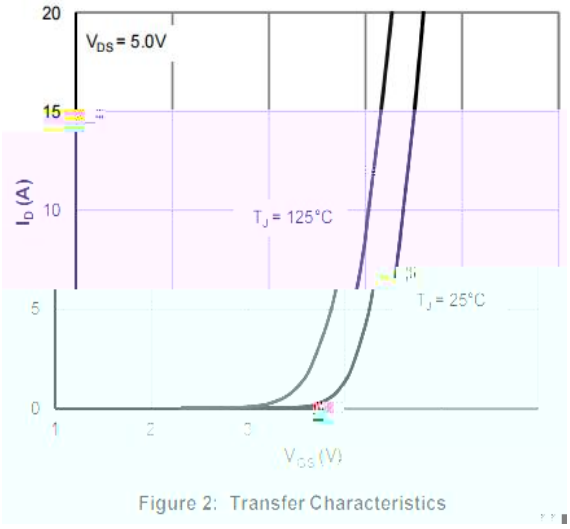


Figure 2: Transfer Characteristics

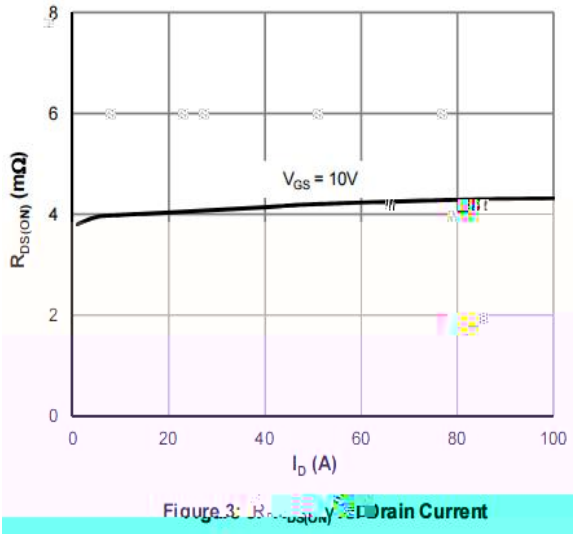


Figure 3: $R_{DS(ON)}$ vs. Drain Current

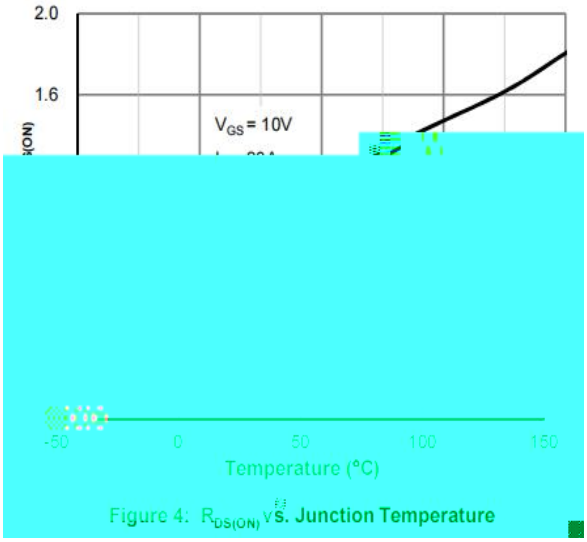


Figure 4: $R_{DS(ON)}$ vs. Junction Temperature

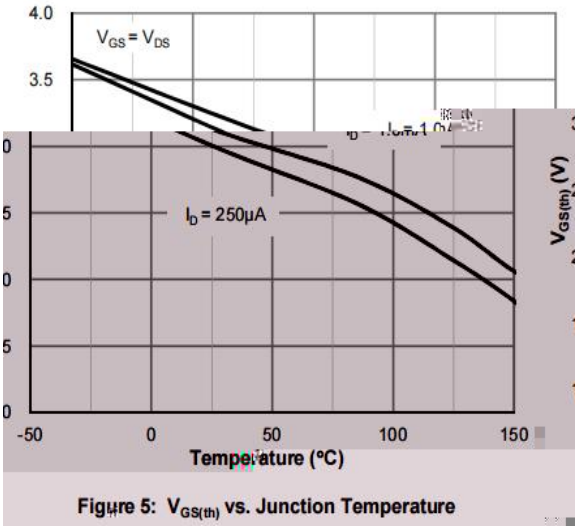


Figure 5: $V_{GS(th)}$ vs. Junction Temperature

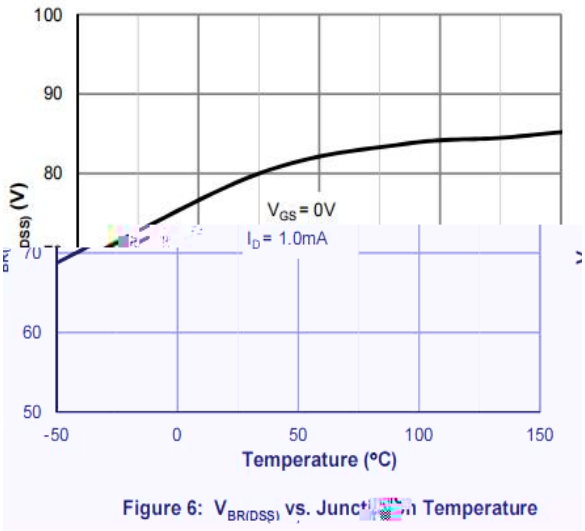
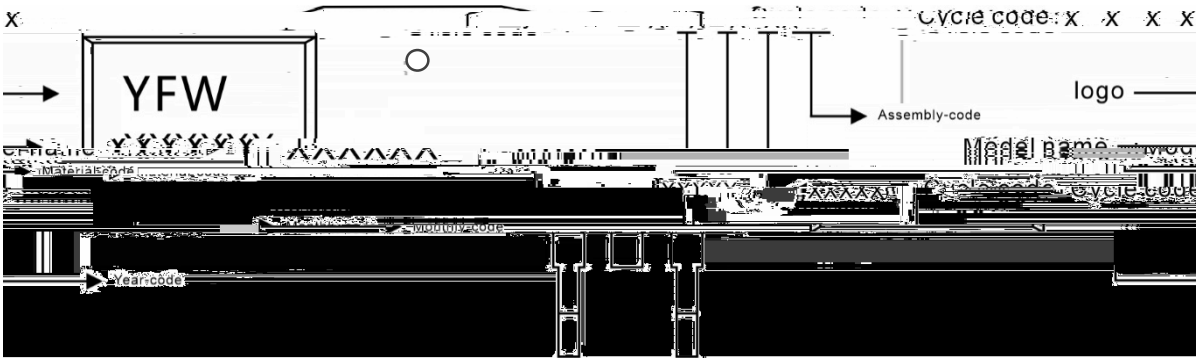


Figure 6: $V_{BR(DSS)}$ vs. Junction Temperature

YF

Marking Diagram

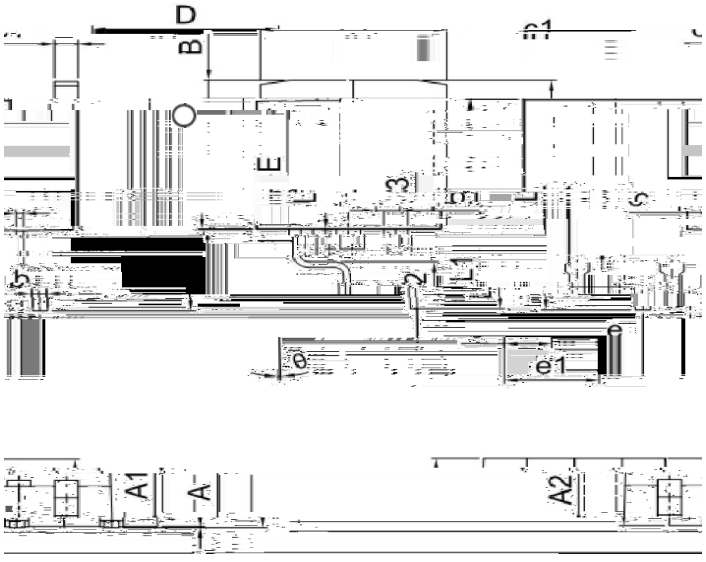


Ordering information

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
YFWG120N085ASC	TO-263C	0.04oz(1.16g)	800pcs/reel	1600pcs/box 8000pcs/Carton

Package Dimensions

TO-263C



Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.30	4.70	0.169	0.185
A1	0.00	0.15	0.000	0.006
A2	4.30	4.55	0.169	0.179
B	1.10	1.50	0.043	0.059
b	0.70	0.90	0.028	0.035
b1	1.20	1.50	0.047	0.059
c	0.30	0.60	0.012	0.024
c1	1.17	1.37	0.046	0.054
D	9.90	10.20	0.390	0.402
E	8.50	8.90	0.335	0.350
e	2.44	2.64	0.096	0.104
e1	4.88	5.28	0.192	0.208
L	15.00	15.30	0.591	0.602
L1	5.20	5.40	0.205	0.213
L2	2.40	2.60	0.094	0.102
L3	1.60	1.80	0.063	0.071