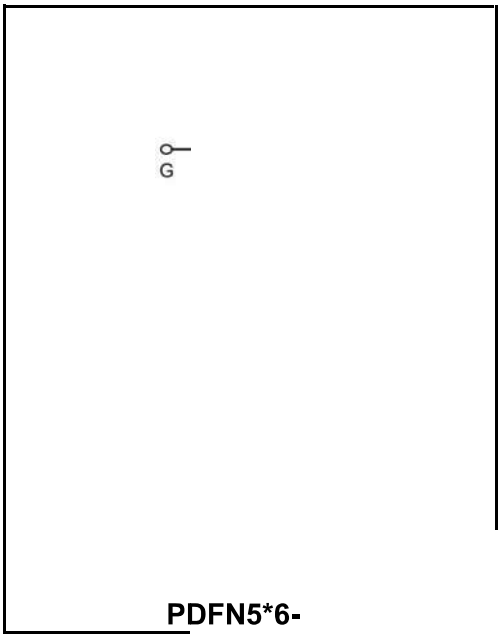
40V N-Channel Trench Power MOSFET

MAIN CHARACTERISTICS

I_D	
V_{DS}	
R_{DSON}-typ(@V_{GS}=10V)	(Typ:8mΩ)



FEATURES

APPLICATION

MECHANICAL DATA

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

Note1:Pulse test: 300 μs pulse width, 2 % duty cycle

Maximum Ratings at Tc=25°C unless otherwise specified

Characteristics	Test Condition	Symbol	Min	Typ	Max	Unit
		BV_{DSS}				V
		I_{DSS}				μA
		I_{GSS}			±	nA
		$V_{GS(th)}$				V
		$R_{DS(ON)}$				mΩ
		C_{iss}				
		C_{oss}				pF
		C_{rss}				
		$t_{d(on)}$				
		T_r				ns
		$t_{d(OFF)}$				
		t_f				
		Q_g				
		Q_{gs}				nC
		Q_{gd}				
		I_S				A

Ratings and Characteristic Curves

Figure 1: Output Characteristics

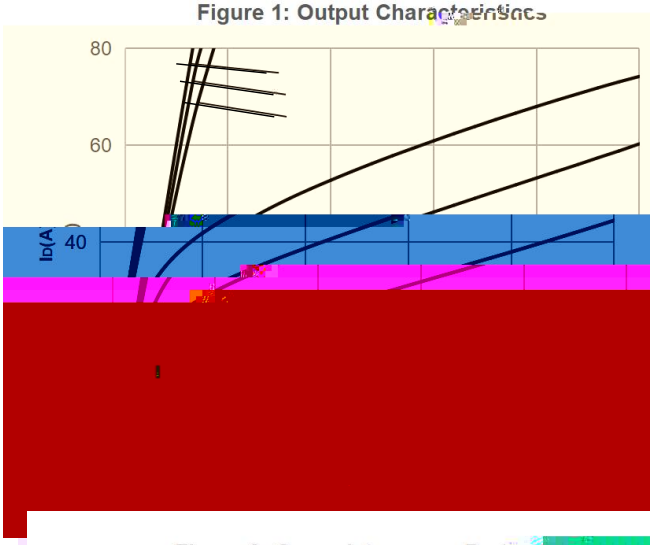








Figure 5: Gate Charge Characteristics

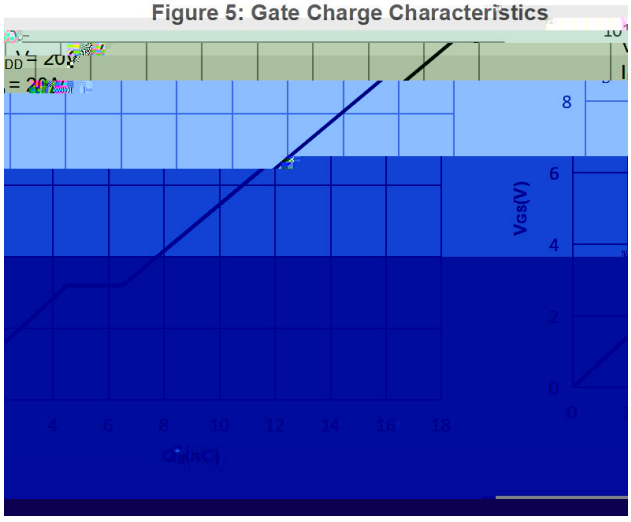
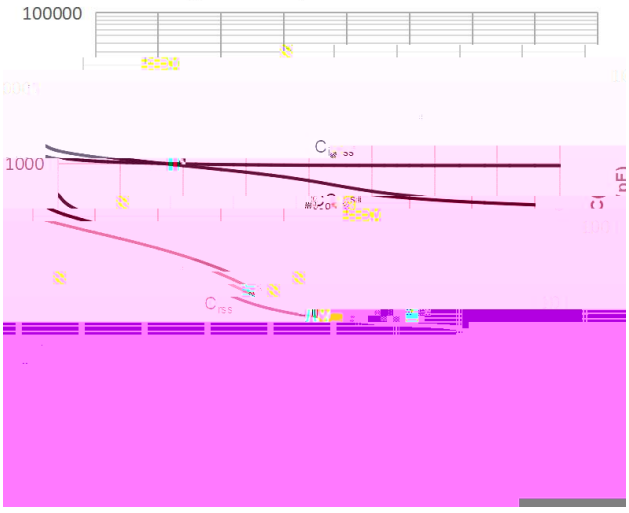


Figure 6: Capacitance Characteristics



Ratings and Characteristic Curves

Figure 7: Normalized Breakdown voltage vs. Junction Temperature

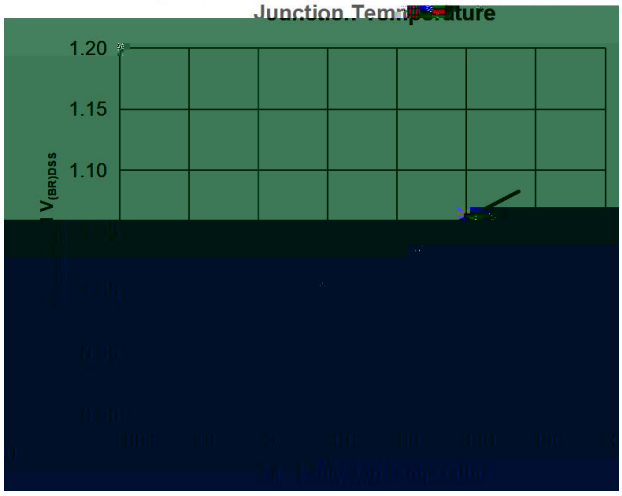


Figure 8: Normalized on Resistance vs. Junction Temperature

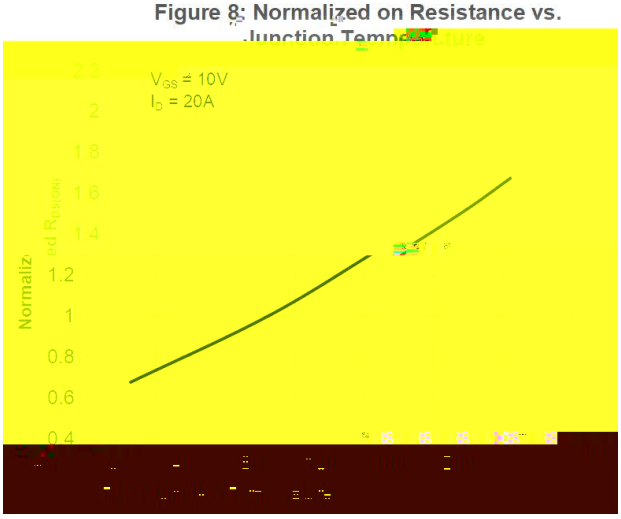


Figure 9: Maximum Safe Operating Area

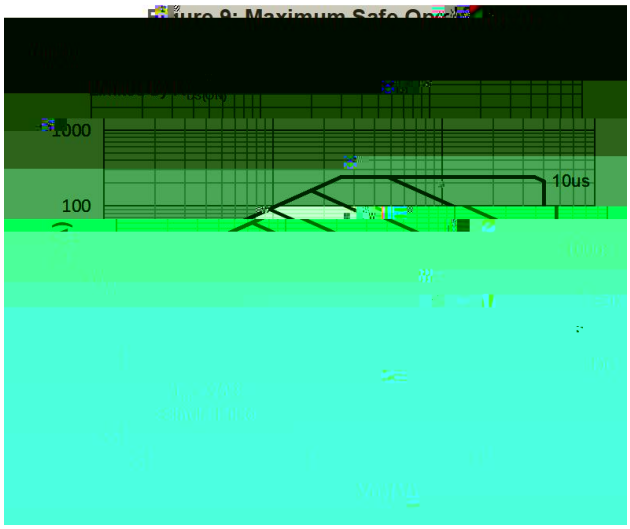


Figure 10: Maximum Continuous Drain Current vs. Case Temperature

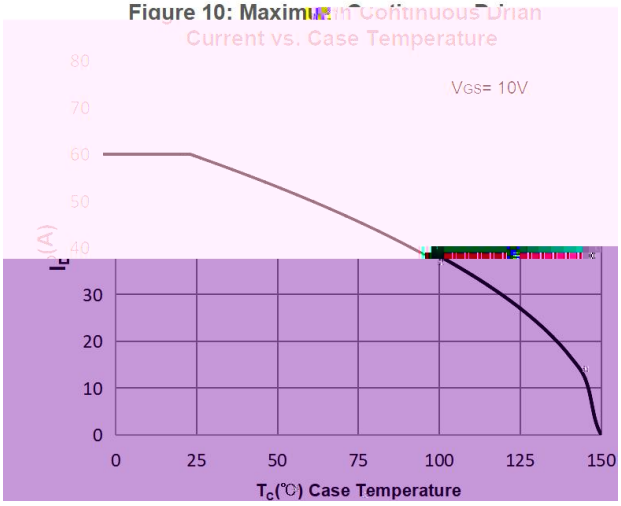


Figure 11: Normalized Thermal Impedance

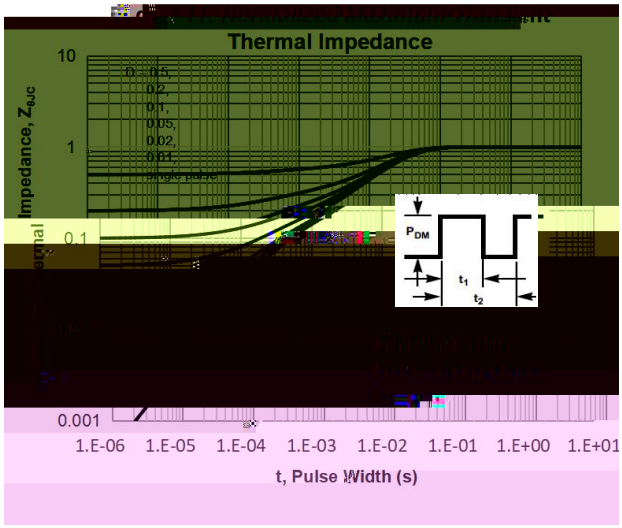
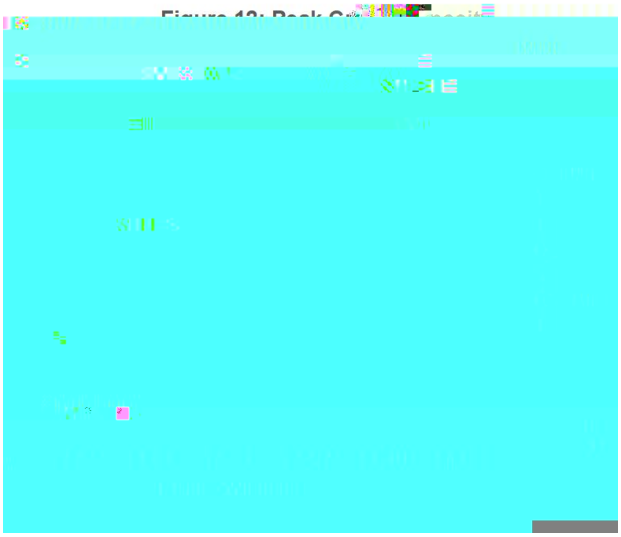
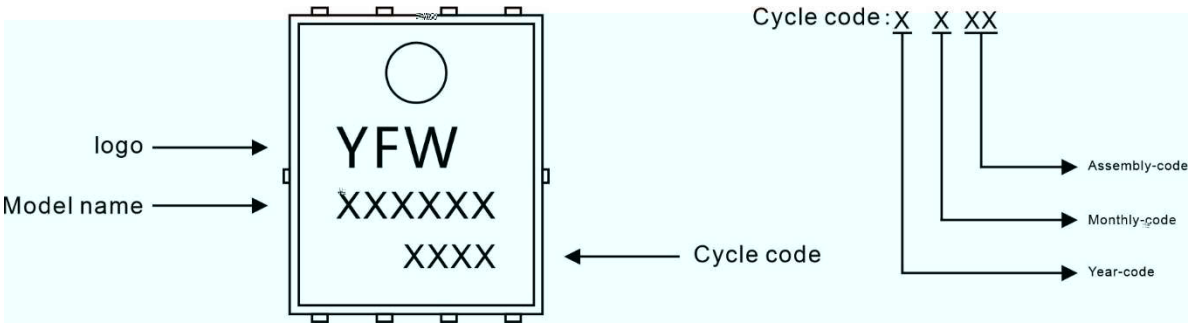


Figure 12: Peak Current Capability




logo
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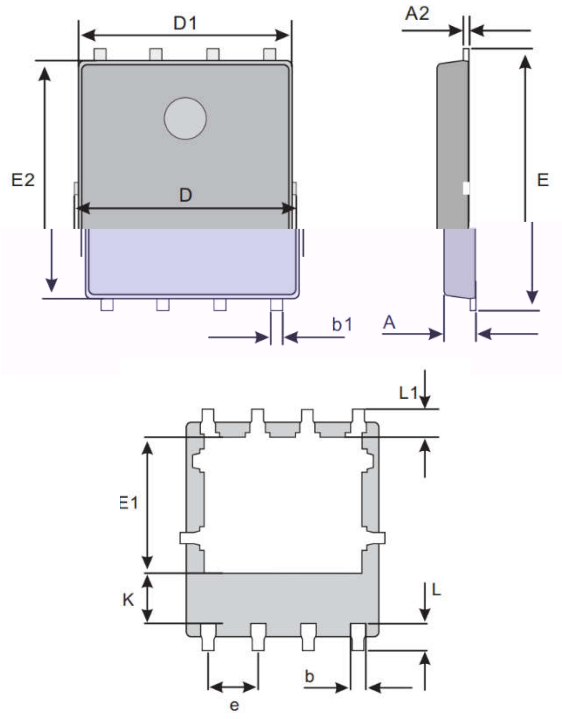
YFW
XXXXXX
XXXX
Cycle code
Cycle code: X X XX
Assembly-code
Monthly-code
Year-code

YFW60N04NF				


D1
A2
E2
D
E
b1
A
L1
E1
K
L
b
e

YF