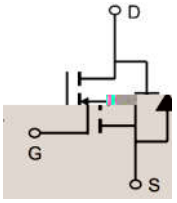
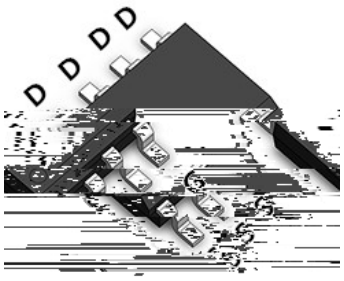
30V N-Channel Enhancement Mode MOSFET

MAIN CHARACTERISTICS

I_D	
V_{DS}	
R_{DSON}-typ(@V_{GS}=10V)	(Typ:3.0mΩ)
R_{DSON}-typ(@V_{GS}=4.5V)	(Typ:5.0mΩ)





SOP-8

DESCRIPTION

APPLICATION

-
-
-

Parameter	Symbol	Value	Units
	V_{DS}		V
	V_{GS}		V
	I_D		A
	I_{DM}		A
	E_{AS}		mJ
	P_D		W
	$R_{\theta JA}$		°C/W

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
		BV_{DSS}				V
		I_{DSS}				μA
		I_{GSS}			±	nA
		$V_{GS(th)}$				V
		$R_{DS(ON)}$				mΩ
						mΩ

Typical Performance Characteristics

Figure 1: Output Characteristics

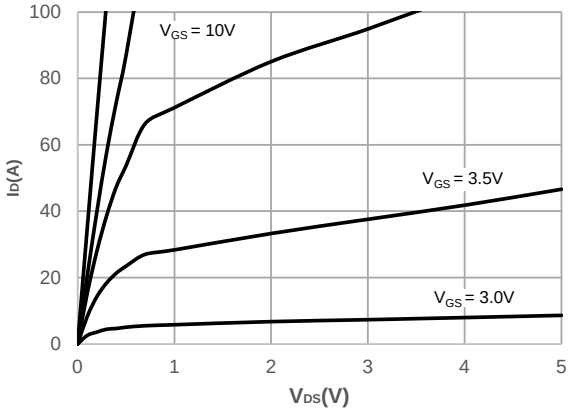


Figure 2: Typical Transfer Characteristics

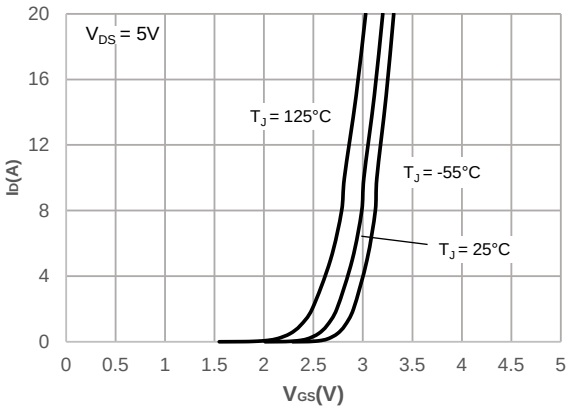


Figure 3: On-resistance vs. Drain Current

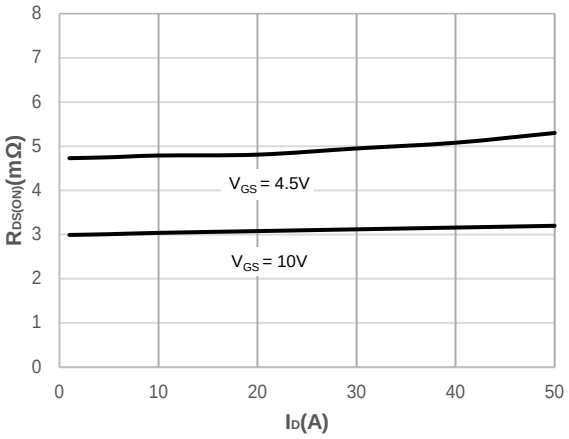


Figure 4: Body Diode Characteristics

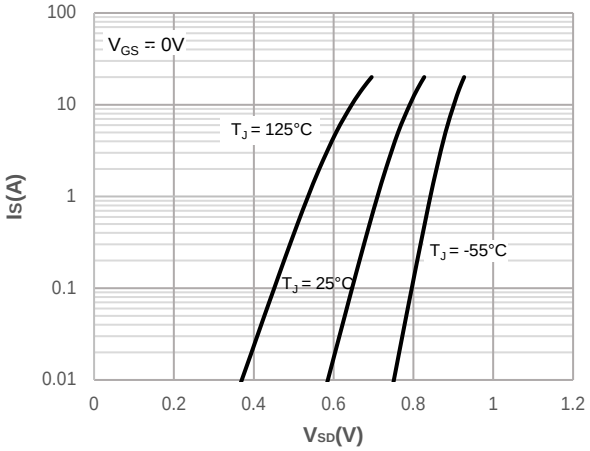


Figure 5: Gate Charge Characteristics

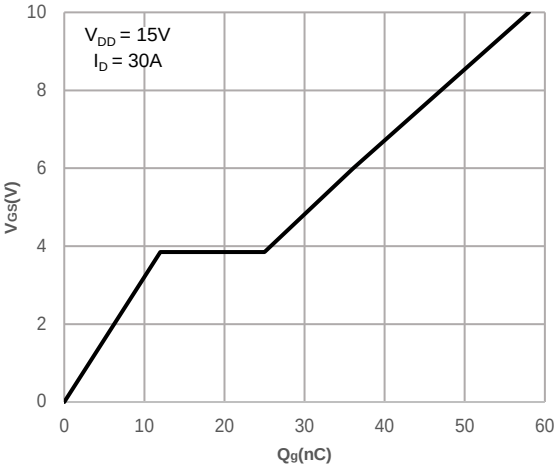
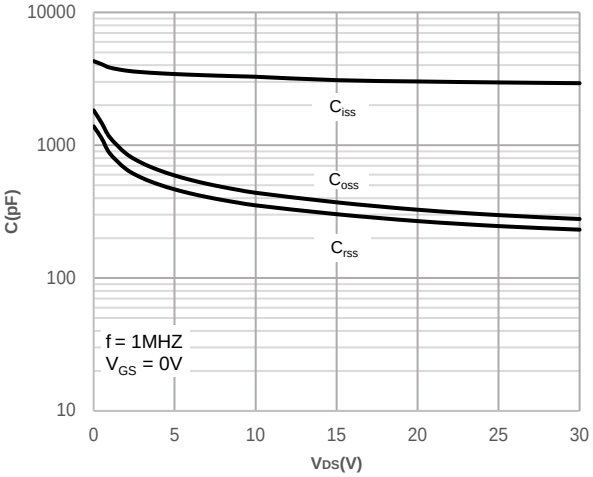


Figure 6: Capacitance Characteristics



Typical Performance Characteristics

Figure 7: Normalized Breakdown voltage vs. Junction Temperature

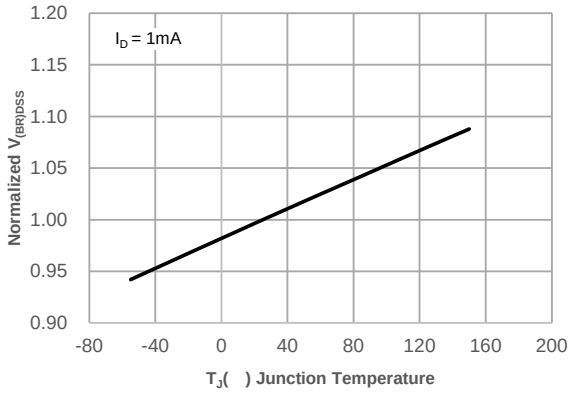


Figure 8: Normalized on Resistance vs. Junction Temperature

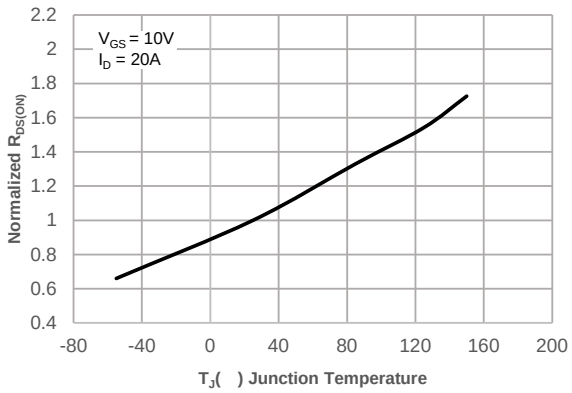


Figure 9: Maximum Safe Operating Area

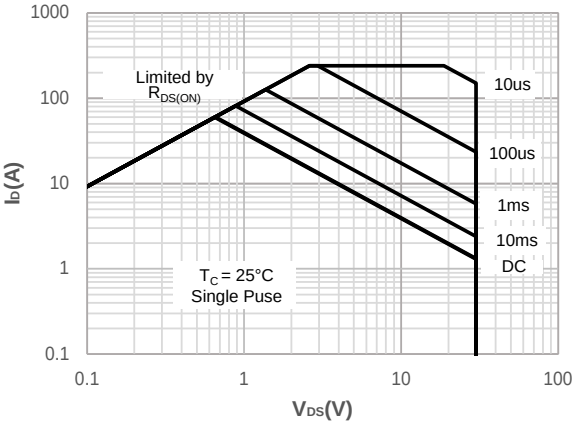
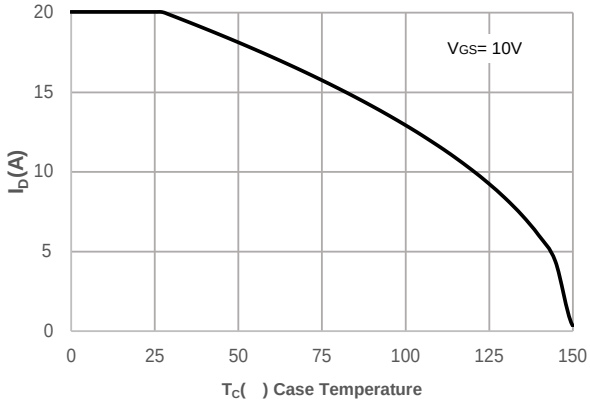
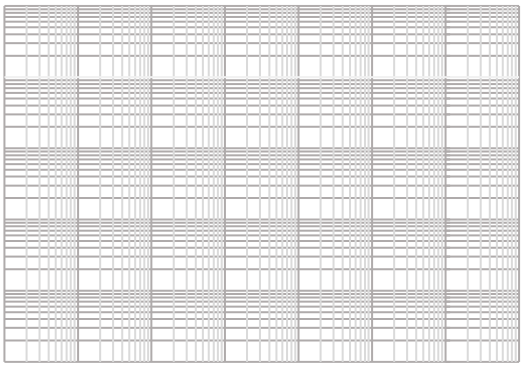
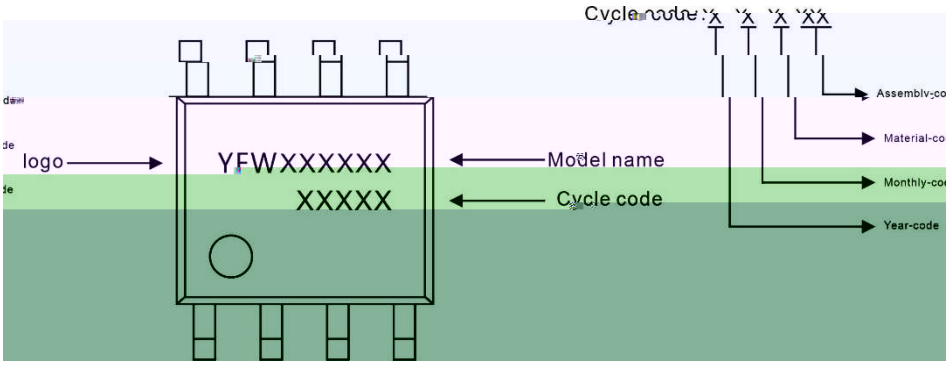


Figure 10: Maximum Continuous Drian Current vs. Case Temperature





Marking Diagram

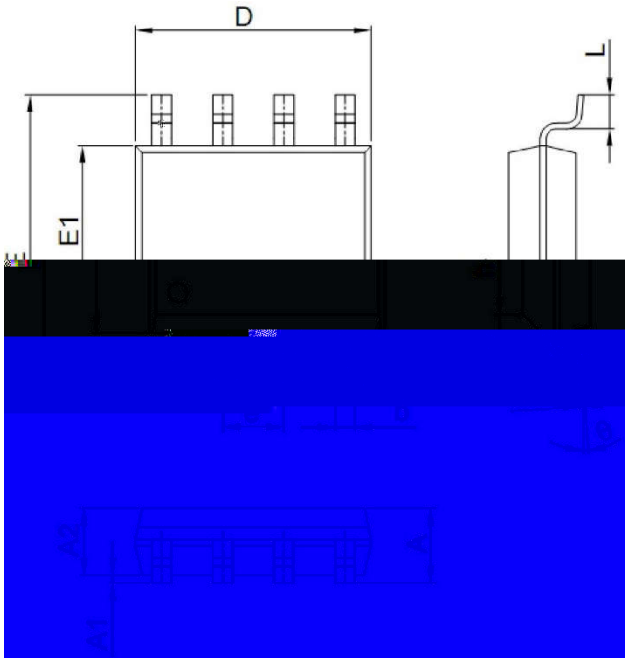


Ordering information

Package	Packing Description	Packing Quantity
SOP-8	Tape/Reel,13”reel	3000PCS/Reel 30000PCS/Carton

Package Dimensions

SOP-8



Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.35	1.75	0.053	0.069
A1	0.10	0.25	0.004	0.010
A2	1.35	1.50	0.053	0.059
b	0.35	0.55	0.014	0.022
c	0.15	0.25	0.006	0.010
D	4.80	5.00	0.189	0.197
D1	3.10	3.50	0.122	0.138
E	5.80	6.20	0.228	0.244
E1	3.80	4.00	0.150	0.157
E2	2.20	2.60	0.087	0.102
e	1.27 (BSC)		0.050 (BSC)	
L	0.40	1.27	0.016	0.050
θ	0°	8°	0°	8°

The recommended mounting pad size

