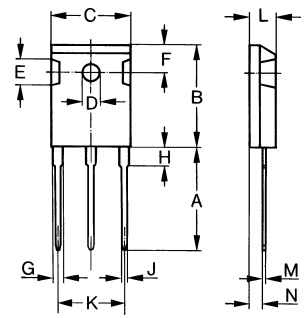
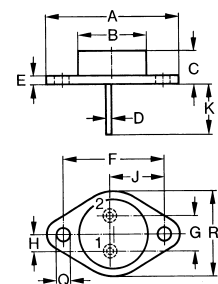


Symbol	Test Conditions	Characteristic Values ($T_j = 25^\circ\text{C}$, unless otherwise specified)		
		min.	typ.	max.
g_{fs}	$V_{DS} = 10\text{ V}$; $I_D = 0.5 I_{D25}$, pulse test	22	25	S
C_{iss}	$V_{GS} = 0\text{ V}$, $V_{DS} = 25\text{ V}$, $f = 1\text{ MHz}$		4800	pF
C_{oss}			745	pF
C_{rss}			280	pF
$t_{d(on)}$	$V_{GS} = 10\text{ V}$, $V_{DS} = 0.5 \cdot V_{DSS}$, $I_D = 0.5 I_{D25}$ $R_G = 2\ \Omega$ (External)		20	30 ns
t_r			60	90 ns
$t_{d(off)}$			75	100 ns
t_f			45	90 ns
$Q_{g(on)}$	$V_{GS} = 10\text{ V}$, $V_{DS} = 0.5 \cdot V_{DSS}$, $I_D = 0.5 I_{D25}$		177	200 nC
Q_{gs}			28	50 nC
Q_{gd}			78	105 nC
R_{thJC}			0.25	0.42 K/W
R_{thCK}				K/W

Source-Drain Diode		Characteristic Values ($T_j = 25^\circ\text{C}$, unless otherwise specified)		
Symbol	Test Conditions	min.	typ.	max.
I_S	$V_{GS} = 0\text{ V}$	35N30 40N30		35 A 40 A
I_{SM}	Repetitive; pulse width limited by T_{JM}	35N30 40N30		140 A 160 A
V_{SD}	$I_F = I_S$, $V_{GS} = 0\text{ V}$, Pulse test, $t \leq 300\ \mu\text{s}$, duty cycle $d \leq 2\%$			1.5 V
t_{rr}	$I_F = I_S$, $-di/dt = 100\text{ A}/\mu\text{s}$, $V_R = 100\text{ V}$	$T_j = 25^\circ\text{C}$ $T_j = 125^\circ\text{C}$		200 ns 350 ns

TO-247 AD (IXFH) Outline


Dim.	Millimeter Min. Max.	Inches Min. Max.
A	19.81 20.32	0.780 0.800
B	20.80 21.46	0.819 0.845
C	15.75 16.26	0.610 0.640
D	3.55 3.65	0.140 0.144
E	4.32 5.49	0.170 0.216
F	5.4 6.2	0.212 0.244
G	1.65 2.13	0.065 0.084
H	- 4.5	- 0.177
J	1.0 1.4	0.040 0.055
K	10.8 11.0	0.426 0.433
L	4.7 5.3	0.185 0.209
M	0.4 0.8	0.016 0.031
N	1.5 2.49	0.087 0.102

TO-204 AE (IXFM) Outline


Dim.	Millimeter Min. Max.	Inches Min. Max.
A	38.61 39.12	1.520 1.540
B	- 22.22	- 0.875
C	6.40 11.40	0.252 0.449
D	1.45 1.60	0.057 0.063
E	1.52 3.43	0.060 0.135
F	30.15 BSC	1.187 BSC
G	10.67 11.17	0.420 0.440
H	5.21 5.71	0.205 0.225
J	16.64 17.14	0.655 0.675
K	11.18 12.19	0.440 0.480
Q	3.84 4.19	0.151 0.165
R	25.16 26.66	0.991 1.050

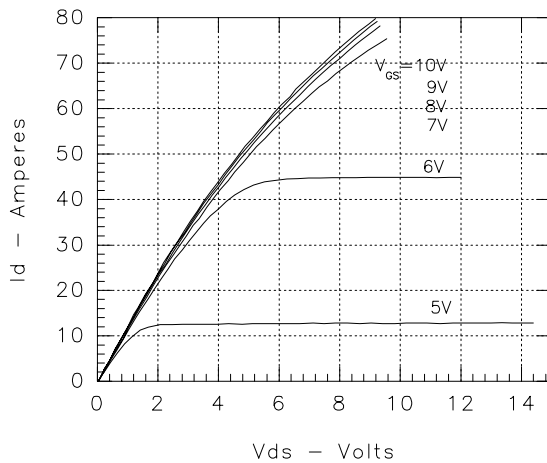
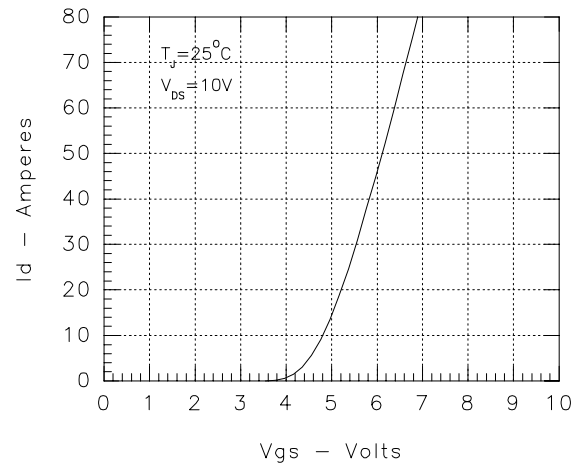
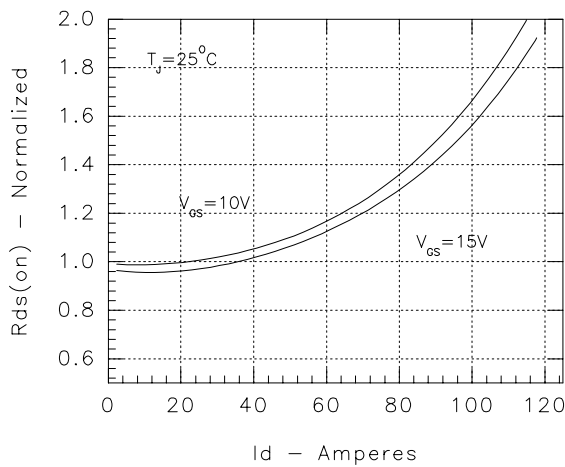
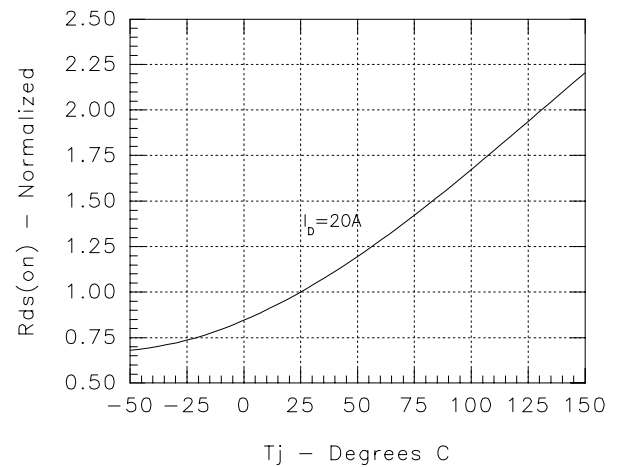
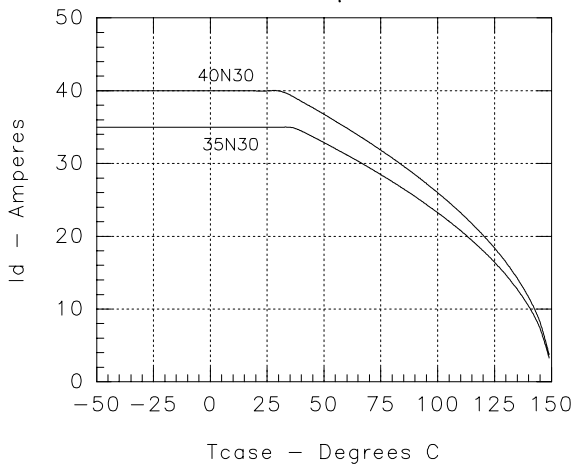
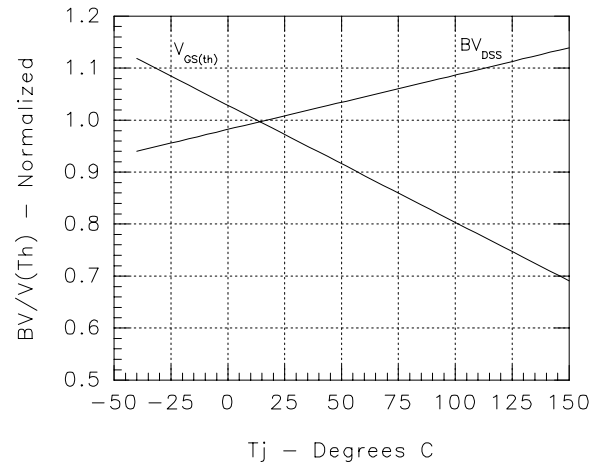
Fig.1. Output Characteristics

Fig. 2. Input Admittance

Fig. 3. Rds(on) vs. Drain Current

Fig. 4. Temperature Dependence of Drain to Source Resistance

Fig. 5. Drain Current vs. Case Temperature

Fig. 6. Temperature Dependence of Breakdown Voltage and Threshold Voltage


Fig.7 Gate Charge Characteristic Curve

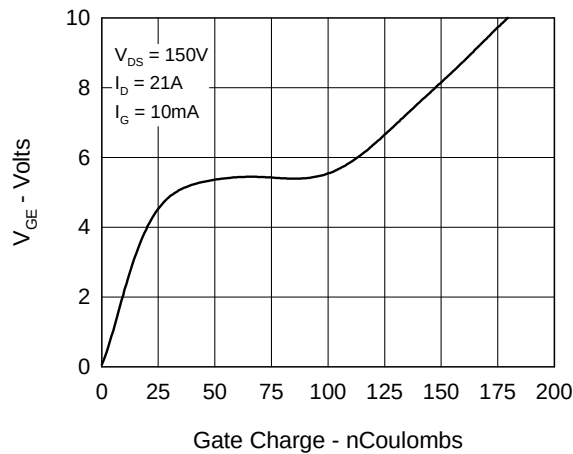


Fig.8 Forward Bias Safe Operating Area

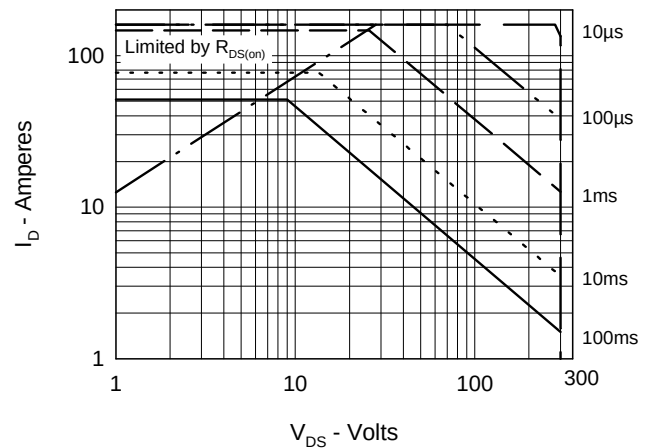


Fig.9 Capacitance Curves

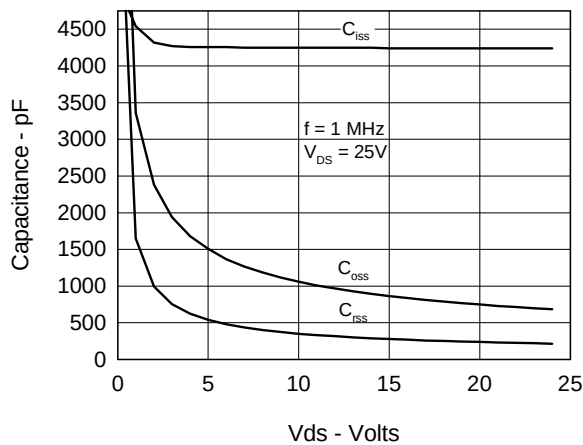


Fig.10 Source Current vs. Source

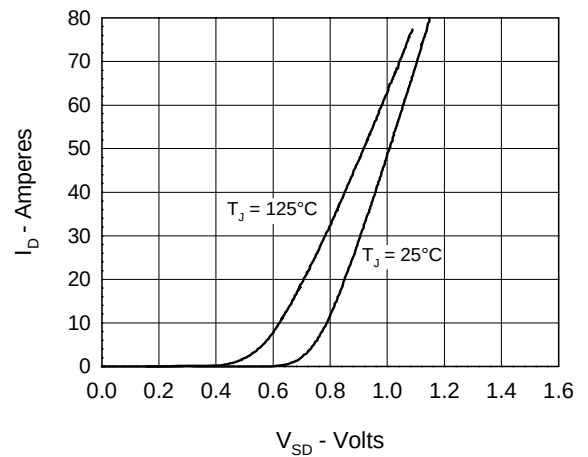


Fig.11 Transient Thermal Impedance

