

ABSOLUTE MAXIMUM RATING (T case = 25°C unless otherwise stated)		(EC-20)16	(EC-20)20
V _{DSX}	Drain - Source Voltage	160V	200V
V _{GSS}	Gate - Source Voltage	±14V	
I _D	Continuous Drain Current	16A	
I _{D(PK)}	Body Drain Diode	16A	
P _D	Total Power Dissipation @ (T case = 25°C)	250W	
T _{stg}	Storage Temperature Range	-55 to 150°C	
T _j	Maximum Operating Junction Temperature	150°C	
R _{θJC}	Thermal Resistance Junction - case	0.5°C/W	

STATIC CHARACTERISTICS (T case = 25°C unless otherwise stated)

Characteristic		Test Conditions		MIN	TYP	MAX	UNIT
		V _{GS} = -10V	(EC-20)16				
B V _{DSX}	Drain - Source Breakdown Voltage	ID = 10mA	(EC-20)20	160			V
B V _{GSS}	Gate - Source Breakdown Voltage	V _{DS} = 0	IG = ±100uA	±14			V
V _{GS(OFF)}	Gate-Source Cut-Off Voltage	V _{DS} = 10V	ID = 100mA	0.10		1.5	V
V _{DS(SAT)*}	Drain - Source Saturation Voltage	V _{GD} = 0	ID = 16A			12	V
I _{DSX}	Drain - Source Cut - Off Current	V _{GS} = -10V	V _{DS} = 160V			10	mA
			(EC-20)16				
			V _{DS} = 200V			10	
			(EC-20)20				
Yfs*	Forward Transfer Admittance	V _{DS} = 10V	ID = 3A	1.4		4	S

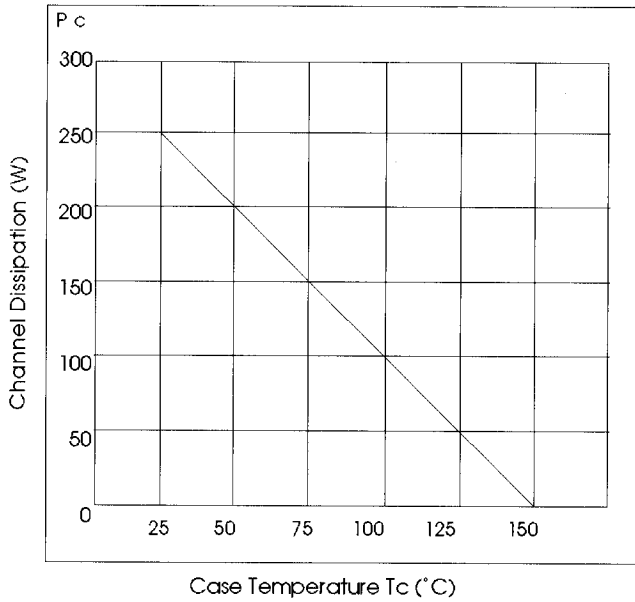
DYNAMIC CHARACTERISTICS (T case = 25°C unless otherwise stated)

Characteristic	Test Conditions	N-Channel P-Channel		UNIT
		TYPICAL		
C _{iss}	V _{DS} = 10V f = 1 MHz	950	1900	pF
C _{oss}		550	900	
C _{rss}		20	60	
t _{on}	V _{DS} = 20V ID = 7A	160	150	ns
t _{off}		80	110	

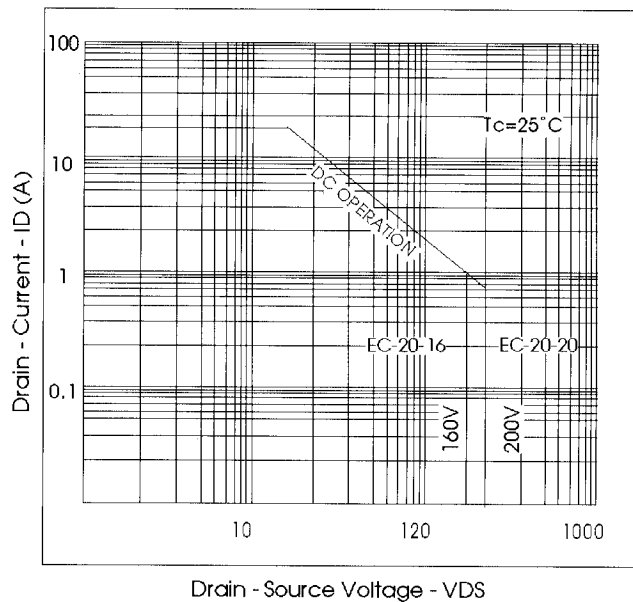
*Pulse Test: Pulse width = 300uS, Duty Cycle ≤ 2%

Typical Characteristics for 250W Devices.

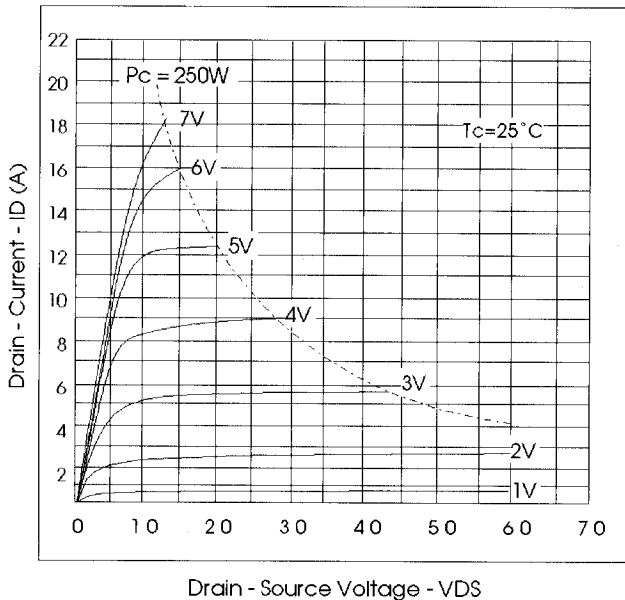
Power vs. Temperature Derating



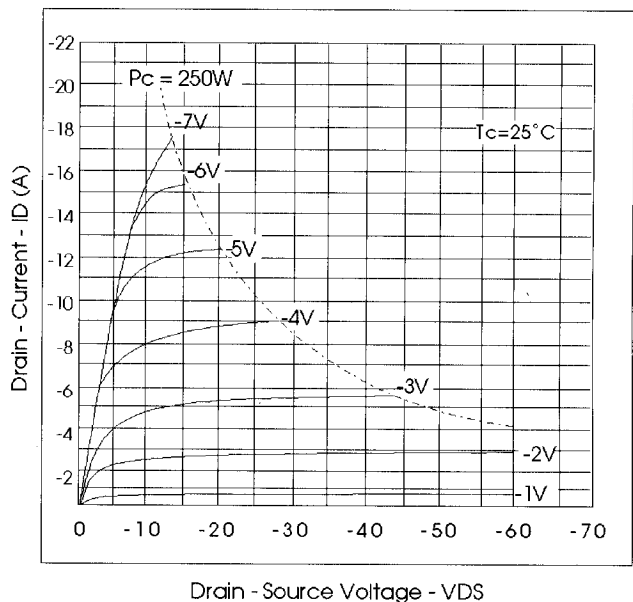
Maximum Safe Operating Area



Typical Output (N-Channel)

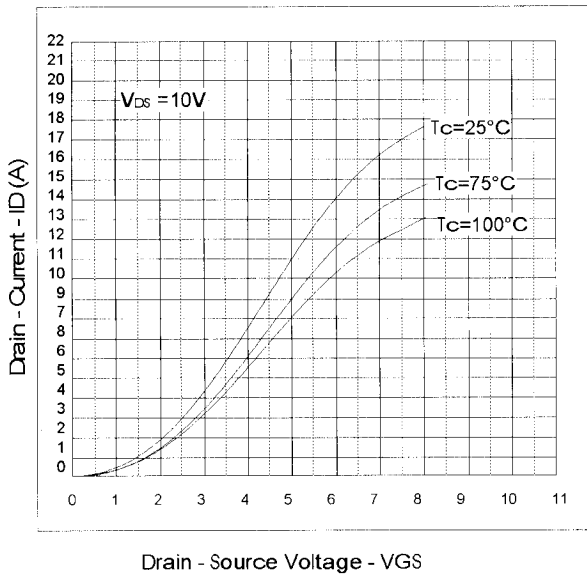


Typical Output (P-Channel)

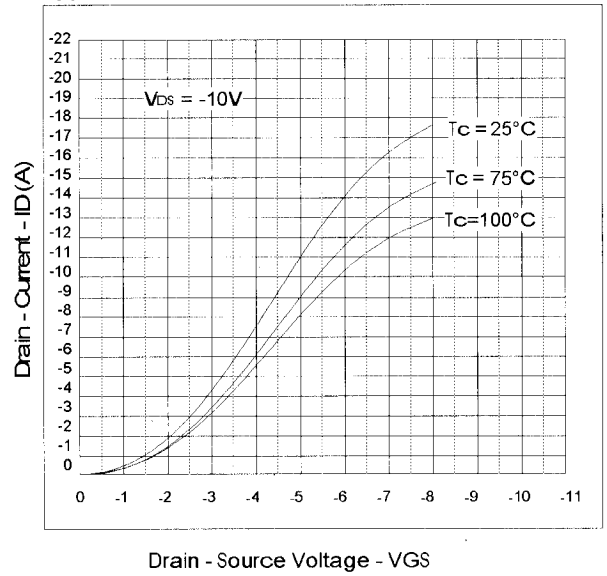


Typical Characteristics for 250W Devices (cont.)

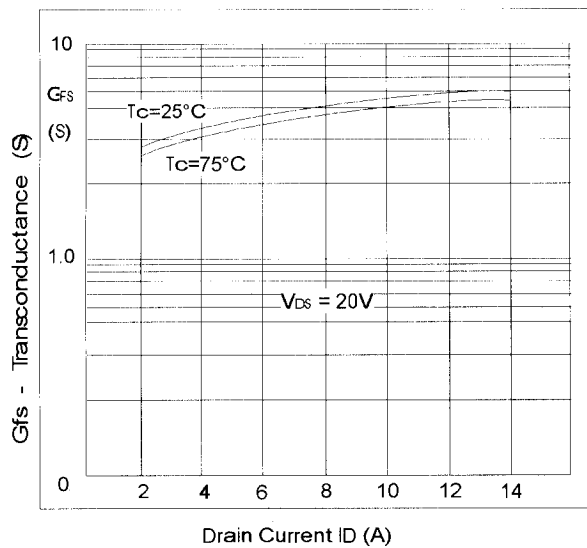
Typical Transfer Characteristics (N-Channel)



Typical Transfer Characteristics (P-Channel)



Forward Transfer Admittance (N-Channel)



Forward Transfer Admittance (P-Channel)

