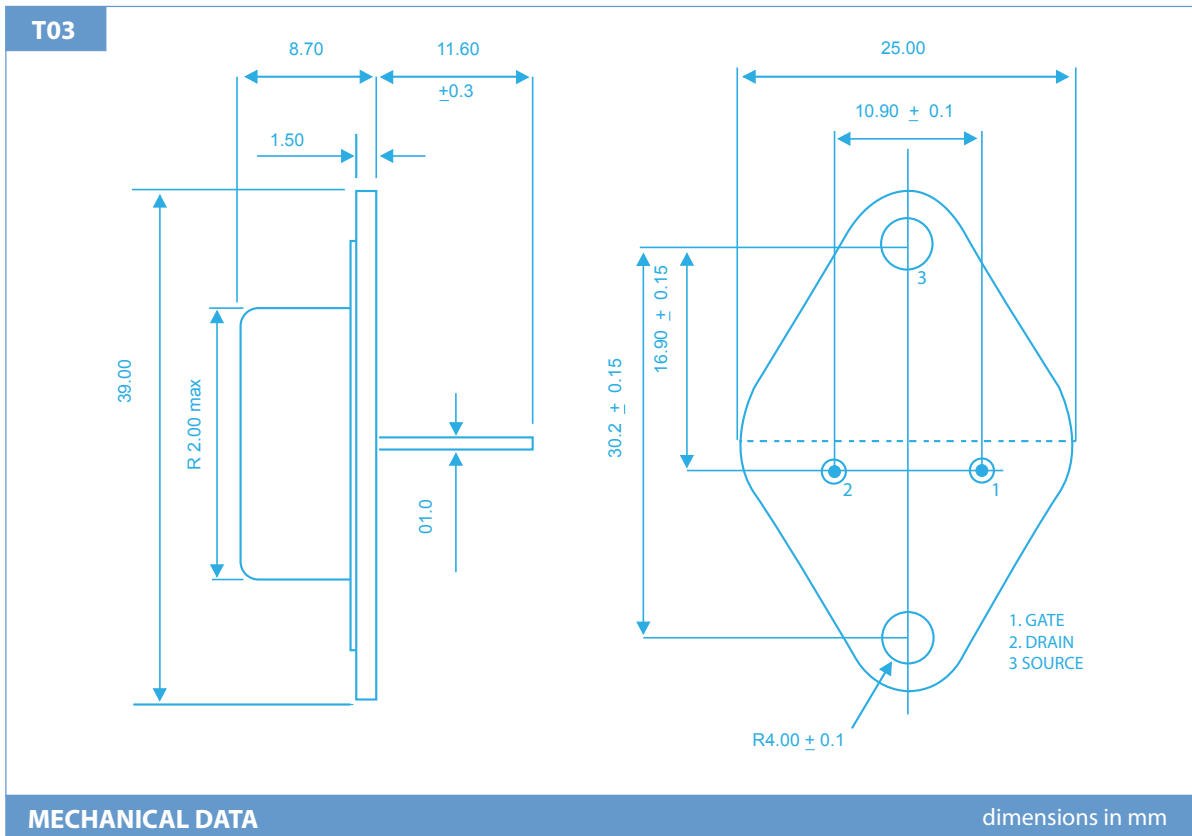


**HIGH POWER 250W
HIGH QUALITY AUDIO AMPLIFIER APPLICATIONS**

N & P CHANNEL LATERAL MOSFETs



ABSOLUTE MAXIMUM RATINGS

(T_C = 25°C unless otherwise stated)

(ECF20)20

V _{DSX}	Drain – Source Voltage	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
RθJC	Thermal Resistance Junction - case	0.5°C/W

STATIC CHARACTERISTICS (T_C= 25°C unless otherwise stated)

Characteristic	Test Conditions		MIN	TYP	MAX	UNIT
BV _{DSX}	Drain – Source Breakdown Voltage	ID = 10mA (ECF20)20	200			V
BV _{GSS}	Gate – Source Breakdown Voltage	VDS = 0 IG=±100uA	±14			V
V _{GS(OFF)}	Gate - Source Cut-Off Voltage	VDS = 10V ID = 100mA	0.10		1.5	V
V _{DS(SAT)} *	Drain - Source Saturation Voltage	VGD = 0 ID = 16A			12	V
I _{DSX}	Drain - Source Cut - Off Current	VDS = 160V (ECF20)16 VGS = -10V VDS =200V (ECF20)20			10 10	mA
Yfs*	Forward Transfer Admittance	VDS = 10V ID = 3A	1.4		4	S

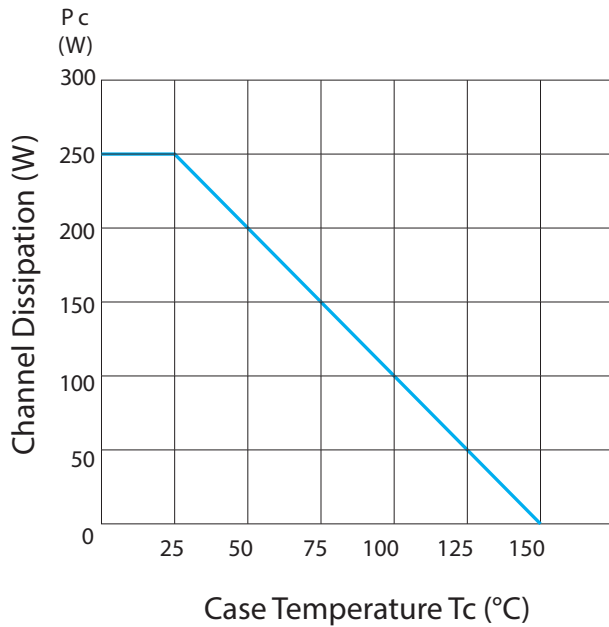
DYNAMIC CHARACTERISTICS (T_C= 25°C unless otherwise stated)

Characteristic	Test Conditions	N-Channel	P-Channel	UNIT	
C _{iss}	Input Capacitance	950	1900		
C _{oss}	Output Capacitance	VDS= 10V f = 1MHz	550	900	pF
C _{rss}	Reverse Transfer Capacitance	20	60		
t _{on}	Turn-on Time	VDS= 20V	160	150	ns
t _{off}	Turn-off Time	ID = 7A	80	110	

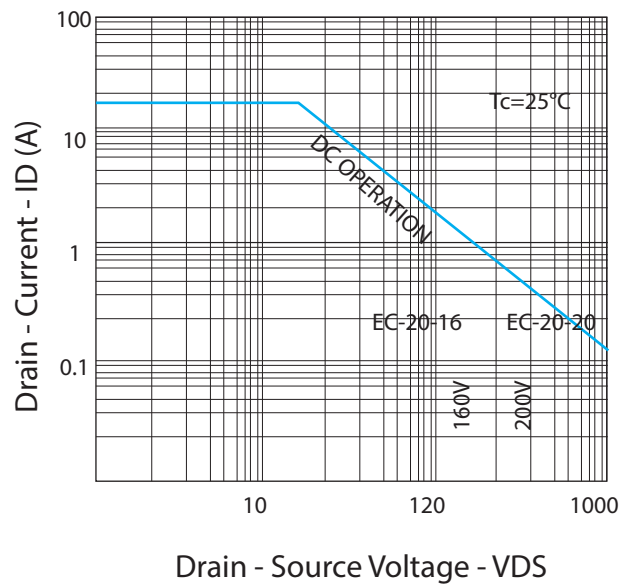
* Pulse Test: Pulse Width = 300μs, Duty Cycle ≤ 2%

Typical Characteristics for 250W devices

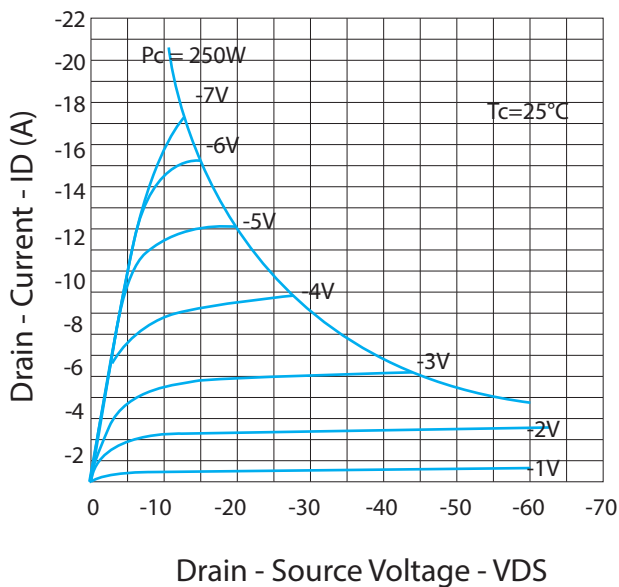
Power vs. Temperature Derating



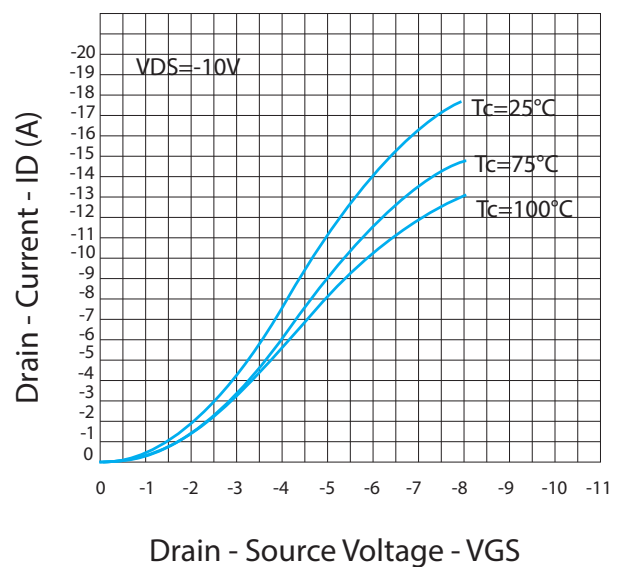
Maximum Safe Operating Area



Typical Output (P-Channel)



Typical Transfer Characteristics (P-Channel)



Typical Characteristics for 250W devices (cont.)

Forward Transfer Admittance (P-Channel)

