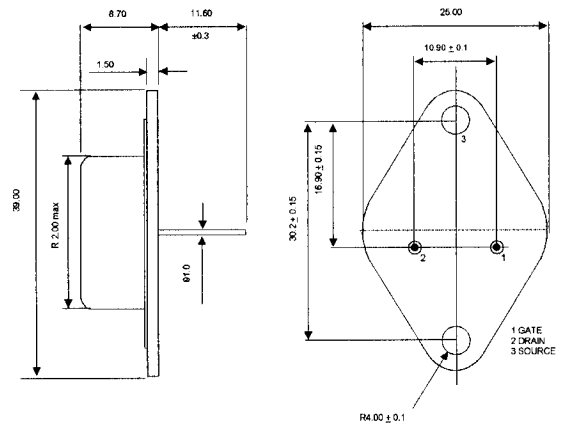
DATA SHEET **EXICON**

Device Family

250V N/P LATERAL MOSFETS

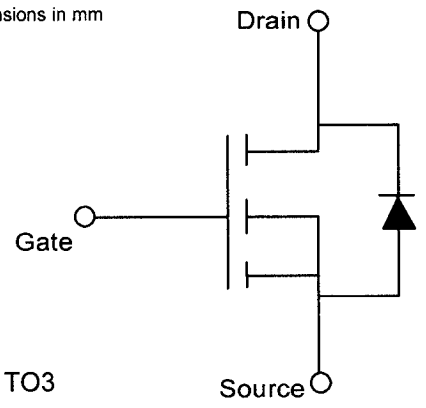
HIGH POWER 125W HIGH QUALITY AUDIO AMPLIFIER APPLICATIONS

ECF10*N/P*25



Mechanical Data
Dimensions in mm

CASE: TO3



ABSOLUTE MAXIMUM RATING (T case = 25°C unless otherwise stated)		ECF10-25
V_{DSX}	Drain - Source Voltage	250V
V_{GSS}	Gate - Source Voltage	±14V
I_D	Continuous Drain Current	8A
$I_{D(PK)}$	Body Drain Diode	8A
P_D	Total Power Dissipation @ (T case = 25°C)	125W
T_{stg}	Storage Temperature Range	-55 to 150°C
T_j	Maximum Operating Junction Temperature	150°C
RθJC	Thermal Resistance Junction - case	1.0°C/W

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

Characteristic		Test Conditions		MIN	TYP	MAX	UNIT
BV_{DSX}	Drain - Source Breakdown Voltage	VGS = -10V		250			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	0.15		1.5	V
$V_{DS(SAT)}$*	Drain - Source Saturation Voltage	VGD = 0	ID = 8A			12	V
I_{DSX}	Drain - Source Cut - Off Current	VGS = -10V	VDS =250V			10	mA
Yfs*	Forward Transfer Admittance	VDS = 10V	ID = 3A	0 7		2	S

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

Characteristic		Test Conditions	N-Channel	P-Channel	UNIT
C_{iss}	Input Capacitance	VDS= ±10V f = 1 MHz			pF
C_{oss}	Output Capacitance				
C_{rss}	Reverse Transfer Capacitance				
t_{on}	Turn-on TIme	VDS= ±20V ID = ±5A			ns
t_{off}	Turn-off Time				

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

PRELIMINARY

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