

EC-20N16/20

EC-20P16/20

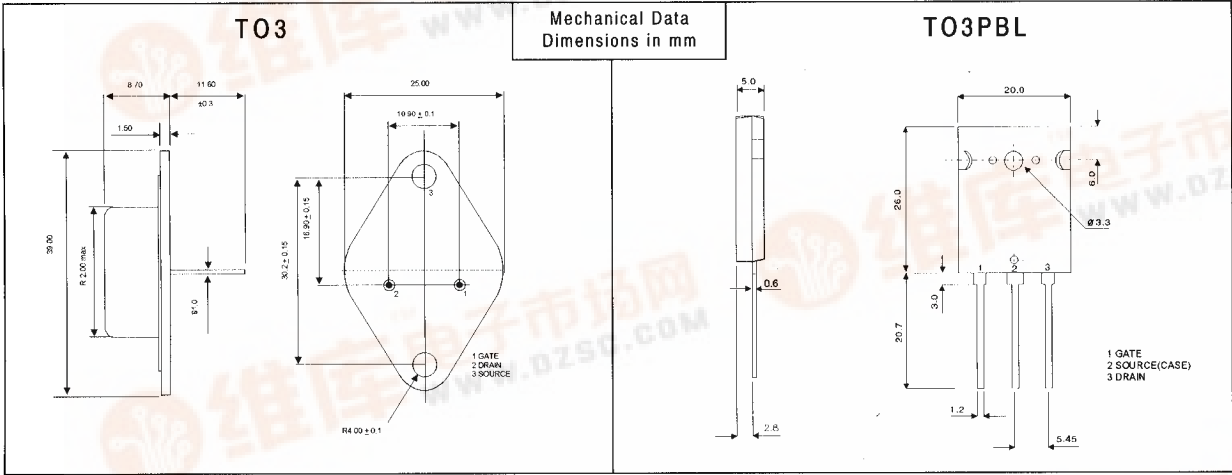
查询EC-20N16供应商

捷多邦，专业PCB打样工厂，24小时加急出货

N AND P CHANNEL LATERAL MOSFETS

HIGH POWER 250W

HIGH QUALITY AUDIO AMPLIFIER APPLICATIONS



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	
RθJC	Thermal Resistance Junction - case	0.5°C/W	

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

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

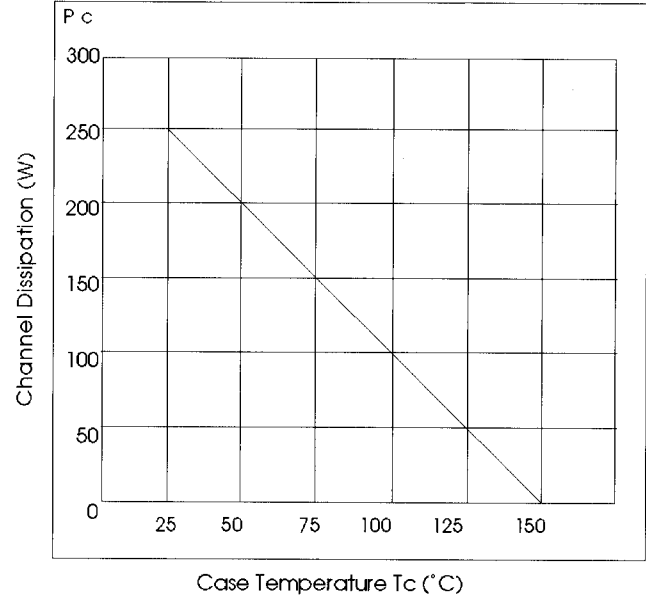
DYNAMIC CHARACTERISTICS (T case = 25°C unless otherwise stated)

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

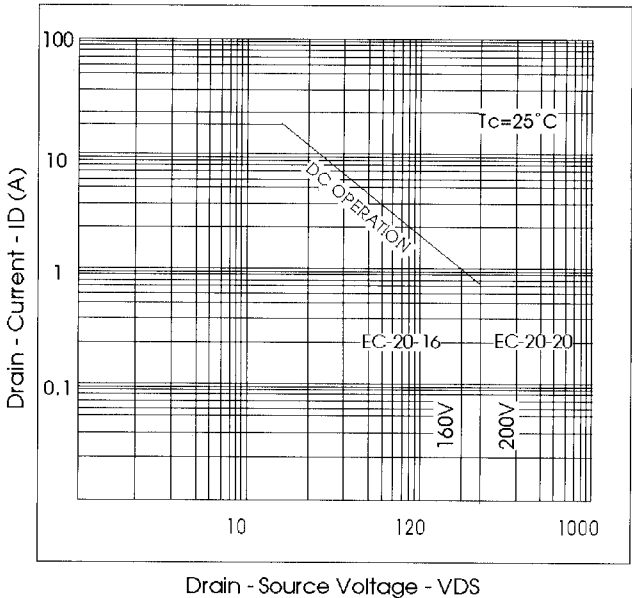
*Pulse Test: Pulse width = 300uS, Duty Cycle ≤2%

Typical Characteristics for 250W Devices.

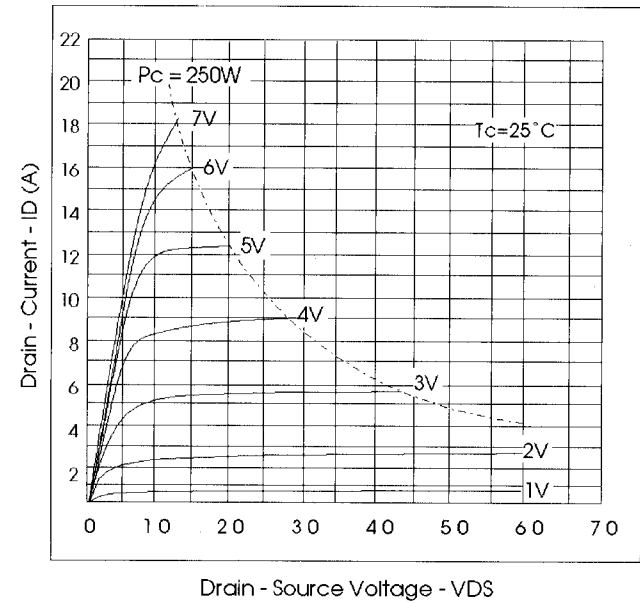
Power vs. Temperature Derating



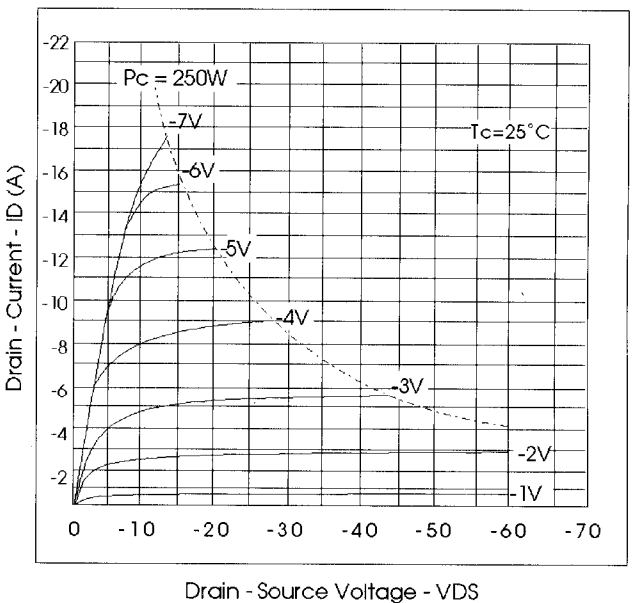
Maximum Safe Operating Area



Typical Output (N-Channel)

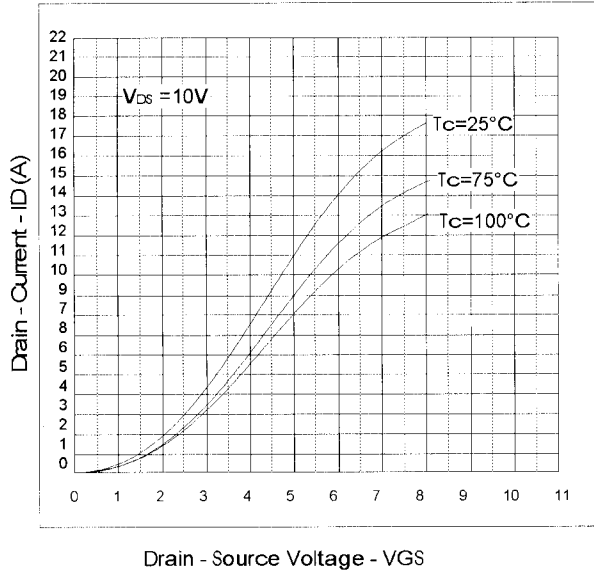


Typical Output (P-Channel)

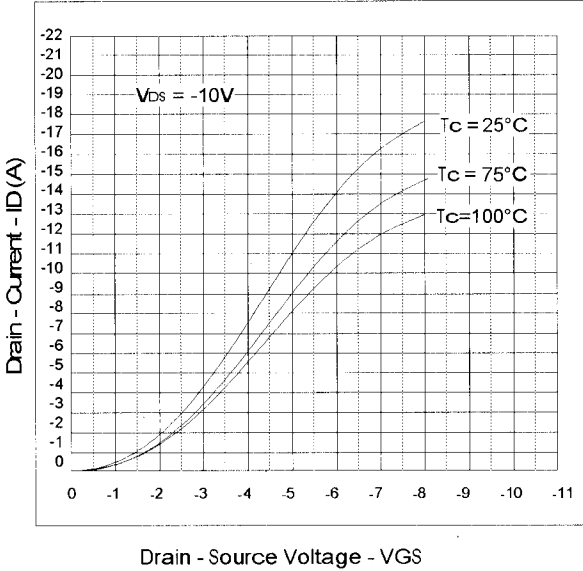


Typical Characteristics for 250W Devices (cont.)

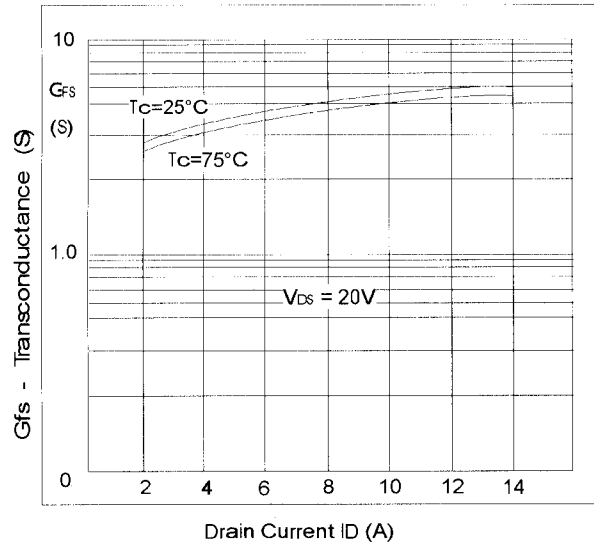
Typical Transfer Characteristics (N-Channel)



Typical Transfer Characteristics (P-Channel)



Forward Transfer Admittance (N-Channel)



Forward Transfer Admittance (P-Channel)

