

# Technical Data

## TRANSISTOR



### maximum ratings

VDS	100.0	V	NO.	BUZ21
VDG	100.0	V	TYPE	V-MOS
VGS	± 20.0	V		
ID	21.0	A		
IDM	84.0	A	CASE	TO-220AB
IG		A		
Max. Power Dissipation (PT) at TC = 25 °C	75.0	W		
Max. Thermal Resistance (Rth J-C)	1.67	°C/W		
Max. Junction Temperature (TJ)	150.0	°C		

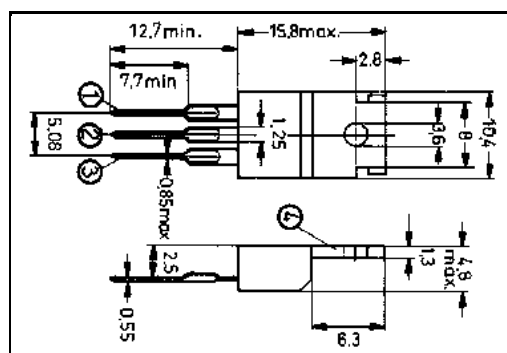
### PERFORMANCE CHARACTERISTICS at $T_c = 25^\circ\text{C}$ , unless otherwise noted

NO.	SYMBOL	CONDITIONS	MIN.	MAX.	UNITS
1.	BVDSS	ID = 250.0 $\mu\text{A}$ (1)	100.0	-	V
2.	IDSS	VDS = 100.0 V	-	250.0	$\mu\text{A}$
3.	IDSS	VDS = 100.0 V, TJ = 125.0° C	-	1.0	mA
4.	IGSS	VGS = ± 20.0 V	-	100.0	nA
5.	VGS(TH)	ID = 1.0 mA	2.1	4.0	V
6.	RDS(ON)	ID = 13.0 A, VGS = 10.0 V	-	0.085	$\Omega$
7.	/Yfs/	VDS = 2.5 V, ID = 13 A (2)	8.0	-	S
8.	Ciss	VDS = 25.0 V, f = 1.0 MHz (2)	-	1300.0	pF
9.	Coss	VDS = 25.0 V, f = 1.0 MHz (2)	-	530.0	pF
10.	Crss	VDS = 25.0 V, f = 1.0 MHz (2)	-	240.0	pF
11.	td(ON)	VDD = 30.0 V, ID = 2.0 A, VGS = 10.0 V (2)	-	40.0	ns
12.	tr	VDD = 30.0 V, ID = 2.0 A, VGS = 10.0 V (2)	-	75.0	ns
13.	td(OFF)	VDD = 30.0 V, ID = 2.0 A, VGS = 10.0 V (2)	-	210.0	ns
14.	tf	VDD = 30.0 V, ID = 2.0 A, VGS = 10.0 V (2)	-	110.0	ns
15.					
16.					
17.					
18.					
19.					
20.					

Notes (1)pulse-tested  $t_p \leq 300 \mu\text{s}$ , duty cycle  $\leq 2\%$   
 (2)typical value

DIMENSIONS  
in mm

1. GATE
2. DRAIN
3. SOURCE



Marking BUZ21  
 Customer GENERAL PURPOSE