

این دیتاشیت توسط توکل الکترونیک تهیه و ارائه شده است.
جهت مشاهده قیمت، موجودی و ثبت سفارش این قطعه به وبسایت توکل الکترونیک مراجعه فرمایید.



مشاهده قیمت و خرید

برای خرید و مشاهده سایر محصولات کلیک کنید



VN88 SERIES

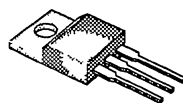
N-Channel Enhancement-Mode MOS Transistors

PRODUCT SUMMARY

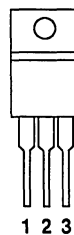
PART NUMBER	$V_{(BR)DSS}$ (V)	$r_{DS(ON)}$ (Ω)	I_D (A)	PACKAGE
VN88AD	80	4	1.49	TO-220
VN88AFD	80	4	1.29	TO-220SD

Performance Curves: VNDQ09 (See Section 7)

TO-220/TO-220SD



TOP VIEW



TO-220

- 1 GATE
- 2 & TAB - DRAIN
- 3 SOURCE

TO-220SD

- 1 SOURCE
- 2 GATE
- 3 & TAB - DRAIN

ABSOLUTE MAXIMUM RATINGS ($T_C = 25^\circ\text{C}$ unless otherwise noted)²

PARAMETERS/TEST CONDITIONS		SYMBOL	VN88AD	VN88AFD	UNITS
Drain-Source Voltage		V _{DS}	80	80	V
Gate-Source Voltage		V _{GS}	±30	±30	
Continuous Drain Current	T _C = 25°C	I _D	1.49	1.29	A
	T _C = 100°C		0.94	0.81	
Pulsed Drain Current ¹		I _{DM}	3	3	
Power Dissipation	T _C = 25°C	P _D	20	15	W
	T _C = 100°C		8	6	
Operating Junction and Storage Temperature		T _J , T _{stg}	-55 to 150		°C
Lead Temperature (1/16" from case for 10 seconds)		T _L	300		

THERMAL RESISTANCE

THERMAL RESISTANCE	SYMBOL	VN88AD	VN88AFD	UNITS
Junction-to-Case	R_{thJC}	6.25	8.3	$^\circ\text{C/W}$

¹Pulse width limited by maximum junction temperature²Absolute maximum ratings have been revised from previous data sheet

VN88 SERIES



ELECTRICAL CHARACTERISTICS ¹				LIMITS		
PARAMETER	SYMBOL	TEST CONDITIONS	TYP ²	VN88 ⁴		UNIT
				MIN	MAX	
STATIC						
Drain-Source Breakdown Voltage	V _{(BR)DSS}	V _{GS} = 0 V, I _D = 10 μA	120	80		V
Gate Threshold Voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D = 1 mA	1.6	0.8	2.5	
Gate-Body Leakage	I _{GSS}	V _{DS} = 0 V V _{GS} = ±15 V T _C = 125°C	± 1 ± 5		± 100 ± 500	nA
Zero Gate Voltage Drain Current	I _{DSS}	V _{GS} = 0 V V _{DS} = 80 V V _{DS} = 64 V, T _C = 125°C	0.03 0.3		10 500	μA
On-State Drain Current ³	I _{D(ON)}	V _{DS} = 10 V, V _{GS} = 10 V	1.8	1.5		A
Drain-Source On-Resistance ³	r _{DS(ON)}	V _{GS} = 5 V, I _D = 0.3 A	4.2		5.6	Ω
		V _{GS} = 10 V I _D = 1 A	3.6		4	
		T _C = 125°C	6.8		8	
Forward Transconductance ³	g _{FS}	V _{DS} = 10 V, I _D = 0.5 A	350	170		mS
Common Source Output Conductance ³	g _{OS}	V _{DS} = 7.5 V, I _D = 0.1 A	225			μS
DYNAMIC						
Input Capacitance	C _{iss}	V _{DS} = 25 V V _{GS} = 0 V f = 1 MHz	35		50	pF
Output Capacitance	C _{oss}		15		40	
Reverse Transfer Capacitance	C _{rss}		2		10	
SWITCHING						
Turn-On Time	t _{ON}	V _{DD} = 25 V, R _L = 23 Ω I _D = 1 A, V _{GEN} = 10 V R _G = 25 Ω	6		15	ns
Turn-Off Time	t _{OFF}	(Switching time is essentially independent of operating temperature)	8		15	

- NOTES: 1. $T_C = 25^\circ\text{C}$ unless otherwise noted.
2. For design aid only, not subject to production testing.
3. Pulse test; $PW = 300\text{ }\mu\text{s}$, duty cycle $\leq 2\%$.
4. Data sheet limits have been revised.