

[查询VP1008B供应商](#)

捷多邦，专业PCB打样工厂

, 24小时加急出货

TEMIC
Semiconductors

VP0808B/L/M, VP1008B/L/M

P-Channel Enhancement-Mode MOSFET Transistors

Product Summary

Part Number	V _{(BR)DSS} Min (V)	I _{D(on)} Max (Ω)	V _{GS(th)} (V)	I _D (A)
VP0808B	-80	5 @ V _{GS} = -10 V	-2 to -4.5	-0.88
		5 @ V _{GS} = -10 V	-2 to -4.5	-0.28
		5 @ V _{GS} = -10 V	-2 to -4.5	-0.31
VP1008B	-100	5 @ V _{GS} = -10 V	-2 to -4.5	-0.79
		5 @ V _{GS} = -10 V	-2 to -4.5	-0.28
		5 @ V _{GS} = -10 V	-2 to -4.5	-0.31

Features

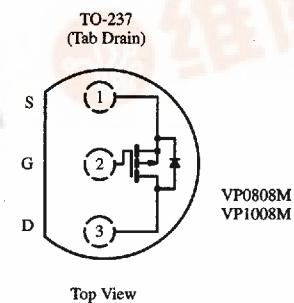
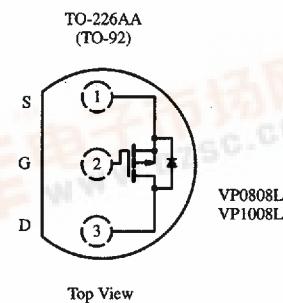
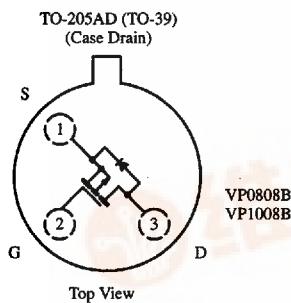
- High-Side Switching
- Low On-Resistance: 2.5 Ω
- Moderate Threshold: -3.4 V
- Fast Switching Speed: 40 ns
- Low Input Capacitance: 75 pF

Benefits

- Ease in Driving Switches
- Low Offset (Error) Voltage
- Low-Voltage Operation
- High-Speed Switching
- Easily Driven Without Buffer

Applications

- Drivers: Relays, Solenoids, Lamps, Hammers, Displays, Memories, Transistors, etc.
- Battery Operated Systems
- Power Supply, Converter Circuits
- Motor Control



Absolute Maximum Ratings (T_A = 25°C Unless Otherwise Noted)

Parameter	Symbol	VP0808B ^b	VP0808L	VP0808M	VP1008B ^b	VP1008L	VP1008M	Unit
Drain-Source Voltage	V _{DS}	-80	-80	-80	-100	-100	-100	V
Gate-Source Voltage	V _{GS}	±20	±30	±30	±20	±30	±30	
Continuous Drain Current (T _J = 25°C) (T _A = 100°C)	I _D	-0.88	-0.28	-0.31	-0.79	-0.28	-0.31	A
		-0.53	-0.17	-0.20	-0.53	-0.17	-0.20	
Pulsed Drain Current ^a	I _{DM}	-3	-3	-3	-3	-3	-3	
Power Dissipation (T _A = 25°C) (T _A = 100°C)	P _D	6.25	0.8	1	6.25	0.8	1	W
		2.5	0.32	0.4	2.5	0.32	0.4	
Maximum Junction-to-Ambient	R _{thJA}		156	125		156	125	°C/W
Maximum Junction-to-Case	R _{thJC}	20			20			
Operating Junction and Storage Temperature Range	T _j , T _{sig}				-55 to 150			°C

Notes

^a Pulse width limited by maximum junction temperature.

^b Reference case for all temperature testing.

Updates to this data sheet may be obtained via facsimile by calling Siliconix FaxBack, 1-408-970-5600. Please request FaxBack document #70218.

[siliconix.com](#)

11-100

Siliconix

P-37655—Rev. B 25-Jul-94

Specifications^a

Parameter	Symbol	Test Conditions	Typ ^b	Limits				Unit
				VP0808B/L/M		VP1008B/L/M		
Static								
Drain-Source Breakdown Voltage	V _{(BR)DSS}	V _{GS} = 0 V, I _D = -10 µA	-110	-80		-100		V
Gate-Threshold Voltage	V _{GS(th)}	V _{DS} = V _{GS} , I _D = -1 mA	-3.4	-2	-4.5	-2	-4.5	
Gate-Body Leakage	I _{GSS}	V _{DS} = 0 V, V _{GS} = ± 20 V T _J = 125°C			± 100		± 100	nA
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} = -80 V, V _{GS} = 0 V T _J = 125°C			-10			µA
		V _{DS} = -100 V, V _{GS} = 0 V T _J = 125°C			-500		-10	
							-500	
On-State Drain Current ^c	I _{D(on)}	V _{DS} = -15 V, V _{GS} = -10 V	-2	-1.1		-1.1		A
Drain-Source On-Resistance ^c	r _{DS(on)}	V _{GS} = -10 V, I _D = -1 A T _J = 125°C	2.5		5		5	Ω
Forward Transconductance ^c	g _{fs}	V _{DS} = -10 V, I _D = -0.5 A	325	200		200		mS
Common Source Output Conductance ^c	g _{os}	V _{DS} = -7.5 V, I _D = -0.1 A	0.45					
Dynamic								
Input Capacitance	C _{iss}	V _{DS} = -25 V, V _{GS} = 0 V f = 1 MHz		75		150		150
Output Capacitance	C _{oss}			40		60		60
Reverse Transfer Capacitance	C _{rss}			18		25		25
Switching^d								
Turn-On Time	t _{d(on)}	V _{DD} = -25 V, R _L = 47 Ω I _D ≈ -0.5 A, V _{GEN} = -10 V R _G = 25 Ω		11		15		15
	t _f			30		40		40
Turn-Off Time	t _{d(off)}			20		30		30
	t _f			20		30		30

Notes

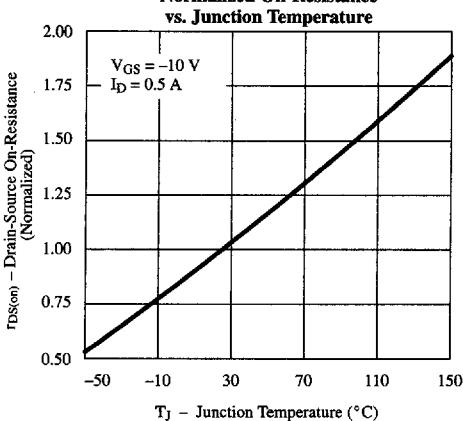
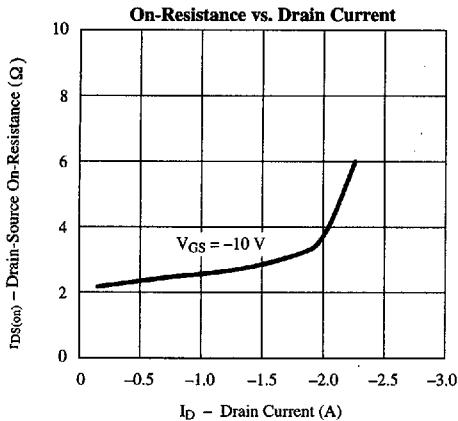
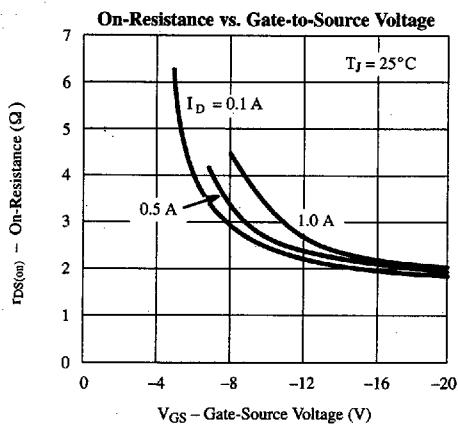
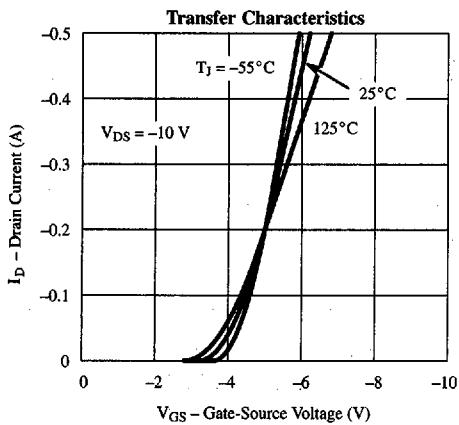
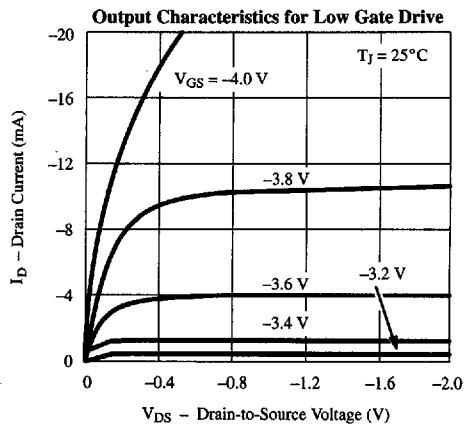
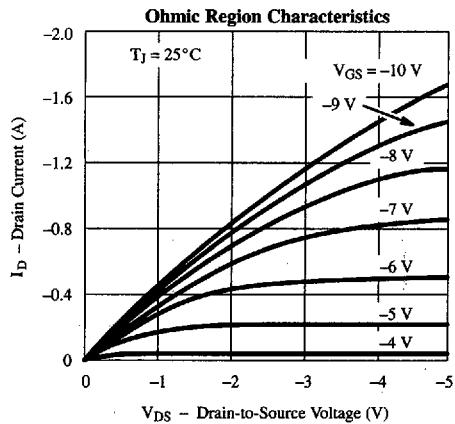
- a. T_A = 25°C unless otherwise noted.
- b. For DESIGN AID ONLY, not subject to production testing.
- c. Pulse test: PW ≤ 300 µs duty cycle ≤ 2%.
- d. Switching time is essentially independent of operating temperature.

VPDV10

VP0808B/L/M, VP1008B/L/M

TEMIC
semiconductors

Typical Characteristics (25°C Unless Otherwise Noted)



Typical Characteristics (25°C Unless Otherwise Noted)

