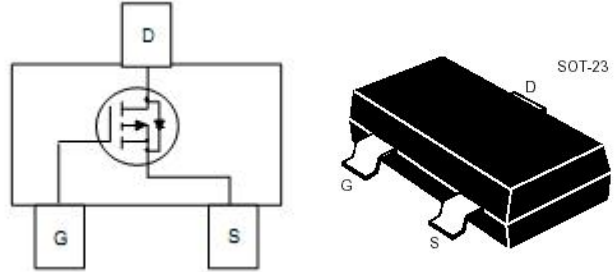




GM3415DH

SOT-23 場效應晶體管(SOT-23 Field Effect Transistors)



**P-Channel Enhancement-Mode MOS FETs**

**P 溝道增強型 MOS 場效應管**

**■MAXIMUM RATINGS 最大額定值**

Characteristic 特性參數	Symbol 符號	Rat 額定值	Unit 單位
Drain-Source Voltage 漏極-源極電壓	$BV_{DSS}$	-20	V
Gate- Source Voltage 柵極-源極電壓	$V_{GS}$	$\pm 12$	V
Drain Current (continuous) 漏極電流-連續	$I_D$	-3.8	A
Drain Current (pulsed) 漏極電流-脈沖	$I_{DM}$	-15	A
Total Device Dissipation 總耗散功率 $T_A=25^\circ\text{C}$ 環境溫度為 $25^\circ\text{C}$	$P_D$	1000	mW
Junction 結溫	$T_J$	150	$^\circ\text{C}$
Storage Temperature 儲存溫度	$T_{stg}$	-55to+150	$^\circ\text{C}$

**■DEVICE MARKING 打標**

**GM3415DH=3415D**

GM3415DH

**■ELECTRICAL CHARACTERISTICS 電特性**
(T<sub>A</sub>=25°C unless otherwise noted 如無特殊說明，溫度為 25°C)

Characteristic 特性參數	Symbol 符號	Min 最小值	Typ 典型值	Max 最大值	Unit 單位
Drain-Source Breakdown Voltage 漏極-源極擊穿電壓(I <sub>D</sub> = -250uA, V <sub>GS</sub> =0V)	BV <sub>DSS</sub>	-20	-23	—	V
Gate Threshold Voltage 柵極開啓電壓(I <sub>D</sub> = -250uA, V <sub>GS</sub> = V <sub>DS</sub> )	V <sub>GS(th)</sub>	-0.45	-0.6	-1.2	V
Diode Forward Voltage Drop 內附二極管正向壓降(I <sub>S</sub> = -0.75A, V <sub>GS</sub> =0V)	V <sub>SD</sub>	—	—	-1.5	V
Zero Gate Voltage Drain Current 零柵壓漏極電流(V <sub>GS</sub> =0V, V <sub>DS</sub> = -20V)	I <sub>DSS</sub>	—	—	-1	uA
Gate Body Leakage 柵極漏電流(V <sub>GS</sub> =±12V, V <sub>DS</sub> =0V)	I <sub>GSS</sub>	—	—	±100	nA
Static Drain-Source On-State Resistance 靜態漏源導通電阻(I <sub>D</sub> = -3.8A, V <sub>GS</sub> = -10V)	R <sub>DS(ON)</sub>	—	29	39	mΩ
Static Drain-Source On-State Resistance 靜態漏源導通電阻(I <sub>D</sub> = -3A, V <sub>GS</sub> = -4.5V)	R <sub>DS(ON)</sub>	—	37	48	mΩ
Static Drain-Source On-State Resistance 靜態漏源導通電阻(I <sub>D</sub> = -2A, V <sub>GS</sub> = -2.5V)	R <sub>DS(ON)</sub>	—	50	70	mΩ
Input Capacitance 輸入電容 (V <sub>GS</sub> =0V, V <sub>DS</sub> = -10V, f=1MHz)	C <sub>ISS</sub>	—	500	—	pF
Output Capacitance 輸出電容 (V <sub>GS</sub> =0V, V <sub>DS</sub> = -10V, f=1MHz)	C <sub>OSS</sub>	—	120	—	pF
Turn-ON Time 開啓時間 (V <sub>DS</sub> = -10V, I <sub>D</sub> = -2A, R <sub>GEN</sub> =6Ω)	t <sub>(on)</sub>	—	8	—	ns
Turn-OFF Time 關斷時間 (V <sub>DS</sub> = -10V, I <sub>D</sub> = -2A, R <sub>GEN</sub> =6Ω)	t <sub>(off)</sub>	—	60	—	ns

Pulse Width≤300 μs; Duty Cycle≤2.0%