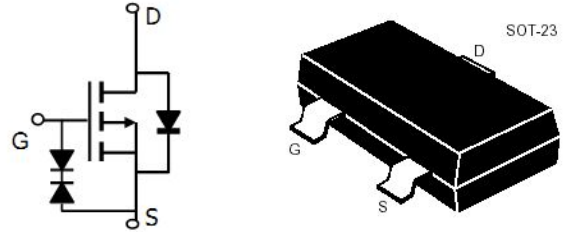




GM3415

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



P-Channel Enhancement-Mode MOS FETs

P 沟道增强型 MOS 场效应管

■MAXIMUM RATINGS 最大額定值

Characteristic 特性參數	Symbol 符號	Max 最大值	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}	± 8	V
Drain Current (continuous) 漏極電流-連續	I_D	-4	A
Drain Current (pulsed) 漏極電流-脉冲	I_{DM}	-17	A
ESD(HBM) 靜電釋放(人體模型)		2500	V
Total Device Dissipation 總耗散功率 $T_A=25^\circ\text{C}$ 環境溫度為 25°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

GM3415=A15E

GM3415

■ ELECTRICAL CHARACTERISTICS 電特性

(TA=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 _D = -250uA, V _{GS} =0V)	BV _{DSS}	-20	—	—	V
Gate Threshold Voltage 柵極開啓電壓(I _D = -250uA, V _{GS} = V _{DS})	V _{GS(th)}	-0.3	—	-1	V
Diode Forward Voltage Drop 內附二極管正向壓降(I _S = -0.75A, V _{GS} =0V)	V _{SD}	—	—	-1.5	V
Zero Gate Voltage Drain Current 零柵壓漏極電流(V _{GS} =0V, V _{DS} = -16V) (V _{GS} =0V, V _{DS} = -16V, T _A =55°C)	I _{DSS}	—	—	-1 -10	uA
Gate Body Leakage 柵極漏電流(V _{GS} =±8V, V _{DS} =0V)	I _{GSS}	—	—	±10	uA
Static Drain-Source On-State Resistance 靜態漏源導通電阻(I _D = -4A, V _{GS} = -4.5V)	R _{DS(ON)}	—	35	43	mΩ
Static Drain-Source On-State Resistance 靜態漏源導通電阻(I _D = -3A, V _{GS} = -2.5V)	R _{DS(ON)}	—	45	54	mΩ
Static Drain-Source On-State Resistance 靜態漏源導通電阻(I _D = -2A, V _{GS} = -1.8V)	R _{DS(ON)}	—	56	73	mΩ
Input Capacitance 輸入電容 (V _{GS} =0V, V _{DS} = -10V, f=1MHz)	C _{ISS}	—	1450	—	pF
Output Capacitance 輸出電容 (V _{GS} =0V, V _{DS} = -10V, f=1MHz)	C _{OSS}	—	205	—	pF
Turn-ON Time 開啓時間 (V _{DS} = -10V, I _D = -2.8A, R _{GEN} =6Ω)	t _(on)	—	9.5	—	ns
Turn-OFF Time 關斷時間 (V _{DS} = -10V, I _D = -2.8A, R _{GEN} =6Ω)	t _(off)	—	94	—	ns

Pulse Width ≤ 300 μs; Duty Cycle ≤ 2.0%