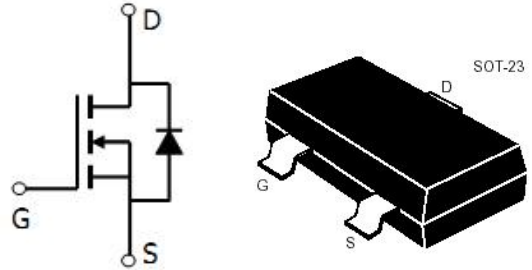GM2016

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

N-Channel Enhancement-Mode MOS FETs

N 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}	± 8	V
Drain Current (continuous) 漏極電流-連續	I_D	3.2	A
Drain Current (pulsed) 漏極電流-脉冲	I_{DM}	10	A
Total Device Dissipation 總耗散功率 $T_A=25℃$ 環境溫度爲 25℃	P_D	1000	mW
Junction 結溫	T_J	150	℃
Storage Temperature 儲存溫度	T_{stg}	-55to+150	℃

■**DEVICE   MARKING 打標**

GM2016=WT6

GM2016

■ELECTRICAL CHARACTERISTICS 電特性

(T_A=25℃ unless otherwise noted 如無特殊說明，溫度爲 25℃)

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 柵極開启電壓(I_D =250uA,V_{GS}= V_{DS})	$V_{GS(th)}$	0.4	—	1	V
Diode Forward Voltage Drop 內附二極管正向壓降(I_S=1A,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)	I_{DSS}	—	—	1	uA
Gate Body Leakage 柵極漏電流(V_{GS}=±8V, V_{DS}=0V)	I_{GSS}	—	—	±100	nA
Static Drain-Source On-State Resistance 静态漏源導通電阻(I_D= 3.6A,V_{GS}= 4.5V)	$R_{DS(ON)}$	—	40	47	mΩ
Static Drain-Source On-State Resistance 静态漏源導通電阻(I_D=3.1A,V_{GS}= 2.5V)	$R_{DS(ON)}$	—	47	55	mΩ
Static Drain-Source On-State Resistance 静态漏源導通電阻(I_D=1.5A,V_{GS}= 1.8V)	$R_{DS(ON)}$	—	55	66	mΩ
Input Capacitance 輸入電容 (V_{GS}=0V, V_{DS}= 10V,f=1MHz)	C_{ISS}	—	500	—	pF
Output Capacitance 輸出電容 (V_{GS}=0V, V_{DS}= 10V,f=1MHz)	C_{OSS}	—	62	—	pF
Turn-ON Time 开启時間 (V_{DS}= 10V, I_D= 3A, R_{GEN}=6Ω)	$t_{(on)}$	—	8	—	ns
Turn-OFF Time 关断時間 (V_{DS}= 10V, I_D= 3A, R_{GEN}=6Ω)	$t_{(off)}$	—	60	—	ns

Pulse Width≤300μs; Duty Cycle≤2.0%