HFZT

LJ3422

SOT-23 Plastic-Encapsulate MOSFETS

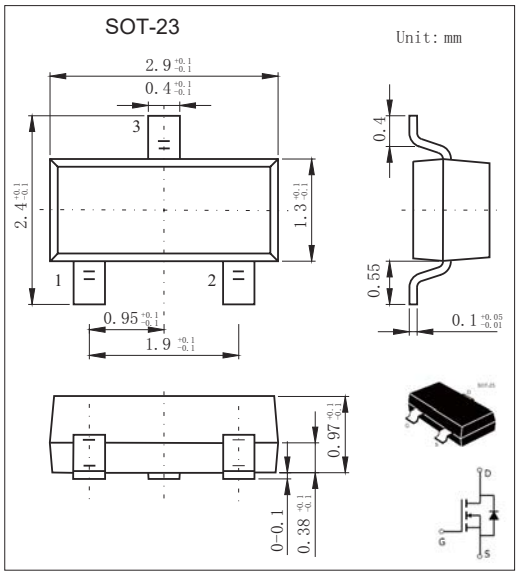
FEATURE

●N-Channel Enhancement-Mode MOSFETs

MECHANICAL DATA

●Case style:SOT-23molded plastic

●Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Characteristic	Symbol	Max	Unit
Drain-Source Voltage	BV_{DSS}	55	V
Gate- Source Voltage	V_{GS}	+12 –	V
Drain Current (continuous)	I_D	2.1	A
Drain Current (pulsed)	I_{DM}	10	A
Total Device Dissipation TA=25℃	P_D	1250	mW
Junction	T_J	150	℃
Storage Temperature	T_{stg}	-55to+150	℃

RATINGS AND CHARACTERISTIC CURVES

MOSFET ELECTRICAL CHARACTERISTICS Ta=25 ℃ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage (ID = 10mA,VGS=0V)	BV_{DSS}	55	—	—	V
Gate Threshold Voltage (ID =250uA,VGS= VDS)	$V_{GS(th)}$	0.6	—	2	V
Diode Forward Voltage Drop (IS=1A,VGS=0V)	V_{SD}	—	—	1	V
Zero Gate Voltage Drain Current VGS=0V, VDS= 44V, (VGS=0V, VDS= 44V, TA=55℃)	I_{DSS}	—	—	1 5	uA
Gate Body Leakage (VGS=±12V, VDS=0V)	I_{GSS}	—	—	±100	nA
Static Drain-Source On-State Resistance(ID= 2.1A,VGS= 4.5V)	$R_{DS(ON)}$	—	125	160	mΩ
Static Drain-Source On-State Resistance(ID= 1.5A,VGS= 2.5V)	$R_{DS(ON)}$	—	160	200	mΩ
Input Capacitance (VGS=0V, VDS= 25V,f=1MHz)	C_{ISS}	—	214	—	pF
Output Capacitance (VGS=0V, VDS= 25V,f=1MHz)	C_{OSS}	—	31	—	pF
Turn-ON Time (VDS= 30V, VGS=10V, RGEN=3Ω)	$t_{(on)}$	—	2	—	n s
Turn-OFF Time (VDS= 30V, VGS=10V, RGEN=3Ω)	$t_{(off)}$	—	16	—	n s

Pulse Width≦300μs; Duty Cycle≦2.0%