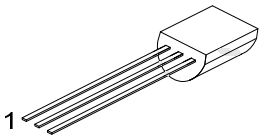
N-CHANNEL JFET LOW-FREQUENCY LOW-NOISE AMPLIFIER

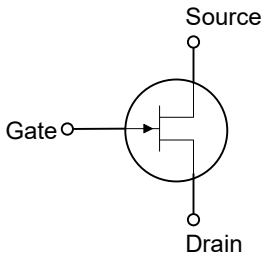


TO-92

■ FEATURES

* Designed for Low Level Analog Switching, Sample and Hold Circuits and Chopper Stabilized Amplifiers
* Source & Drain are Interchangeable

■ SYMBOL



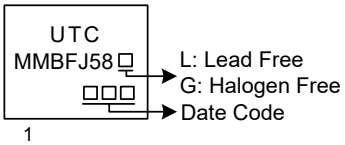
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
MMBFJ58L-T92-B	MMBFJ58G-T92-B	TO-92	D	S	G	Tape Reel
MMBFJ58L-T92-K	MMBFJ58G-T92-K	TO-92	D	S	G	Tape Reel

Note: Pin Assignment: D: Drain S: Source G: Gate

MMBFJ58G-T92-B (1)Packing Type (2)Package Type (3)Green Package	(1) B: Tape Box, K: Bulk (2) T92: TO-92 (3) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Drain-Source Voltage	V_{DS}	40	V
Drain-Gate Voltage	V_{DG}	40	V
Gate-Source Voltage	V_{GSS}	-40	V
Forward Gate Current	I_{GF}	50	mA
Power Dissipation	P_D	625	mW
Junction Temperature	T_J	-55 ~ +150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

PARAMETER	SYMBOL	RATING	UNIT
Junction to Ambient	θ_{JA}	200	°C/W
Case to Ambient	θ_{JC}	125	°C/W

Note: Device mounted on FR-4 PCB.

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
OFF CHARACTERISTICS						
Gate-Source Breakdown Voltage	$V_{(BR)GSS}$	I_G=-1.0μA, V_{DS}=0	-40			V
Gate Reverse Current (Note)	I_{GSS}	V_{GS}=-20V, V_{DS}=0			-1.0	nA
Gate-Source Cut-Off Voltage	$V_{GS(OFF)}$	V_{DS}=15V, I_D=10nA	-2		-5	V
Off-State Drain Current	$I_{D(OFF)}$	V_{GS}=-12V, V_{DS}=15V			1	nA
ON CHARACTERISTICS						
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=15V, V_{GS}=0	8.0		80	mA
Drain-Source On Voltage	$V_{DS(ON)}$	I_D=12mA, V_{GS}=0			0.4	V
Drain-Source On Resistance	$R_{DS(ON)}$	V_{DS} ≤ 0.1V, V_{GS}=0			60	Ω

Note: Pulse test: pulse width ≤ 300μs, duty cycle ≤ 2%.