

SILICON N CHANNEL DUAL GATE MOS TYPE

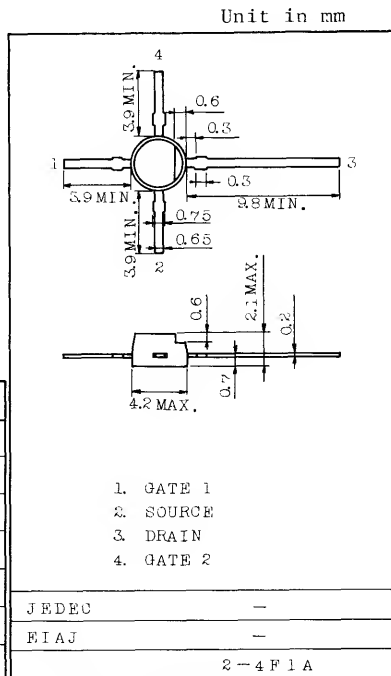
TV TUNER VHF MIXER APPLICATIONS.

FEATURES:

- . Superior Cross Modulation Performance,
- . Low Reverse Transfer Capacitance :C_{RSS}=0.03pF(Typ.)
- . Low Noise Figure : NF=2.2dB(Typ.)

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Drain-Source Voltage	V_{DS}	20	V
Gate1-Source Voltage	V_{G1S}	± 9	V
Gate2-Source Voltage	V_{G2S}	± 9	V
Drain Current	I_D	30	mA
Drain Power Dissipation	P_D	200	mW
Channel Temperature	T_{ch}	125	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	$-55 \sim +125$	$^{\circ}\text{C}$

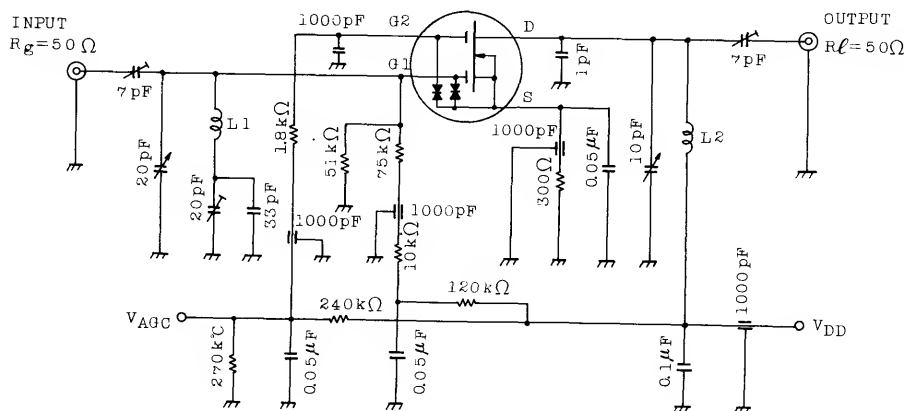


Weight : 0.08g

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate1 Leakage Current	I_{G1SS}	$V_{DS}=0, V_{G1S}=\pm 7V, V_{G2S}=0$	-	-	± 50	nA
Gate2 Leakage Current	I_{G2SS}	$V_{DS}=0, V_{G1S}=0, V_{G2S}=\pm 7V$	-	-	± 50	nA
Drain-Source Voltage	$V(BR)_{DSX}$	$V_{G1S}=-4V, V_{G2S}=-4V$ $I_D=100\mu A$	20	-	-	V
Drain Current	I_{DSS} (Note)	$V_{DS}=15V, V_{G1S}=0, V_{G2S}=4V$	3	-	24	mA
Gate1-Source Cut-off Voltage	$V_{G1S}(OFF)$	$V_{DS}=15V, V_{G2S}=4V, I_D=100\mu A$	0	-	-2.5	V
Gate2-Source Cut-off Voltage	$V_{G2S}(OFF)$	$V_{DS}=15V, V_{G1S}=0, I_D=100\mu A$	0	-	-2.5	V
Forward Transfer Admittance	$ Y_{fs} $	$V_{DS}=15V, V_{G2S}=4V,$ $I_D=10mA, f=1kHz$	-	20	-	mS
Input Capacitance	C_{iss}	$V_{DS}=15V, V_{G2S}=4V,$	-	4.25	-	pF
Reverse Transfer Capacitance	C_{rss}	$I_D=10mA, f=1MHz$	-	0.03	0.05	pF
Power Gain	G_{ps}	$V_{DD}=15V, f=200MHz$	16	20	-	dB
Noise Figure	NF	(Fig.)	-	2.2	3.2	dB

Note : I_{DSS} Classification: Y:3.0~7.0 GR:6.0~14.0 BL:12.0~24.0 (mA)

Fig. G_{ps} , NF TEST CIRCUIT

L1 : 1.0mm ϕ SILVER PLATED COPPER WIRE 1.0T 10mm ID

L2 : 1.0mm ϕ SILVER PLATED COPPER WIRE 1.5T 10mm ID

