

TOSHIBA FIELD EFFECT TRANSISTOR GaAs N-CHANNEL DUAL GATE MES TYPE

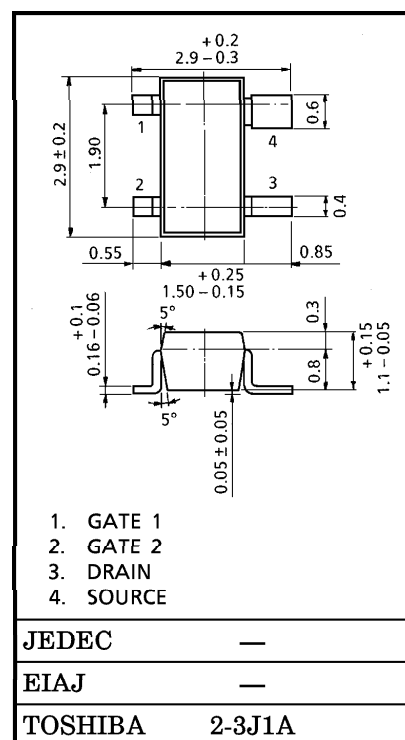
3SK240

TV TUNER, UHF RF AMPLIFIER APPLICATIONS

Unit in mm

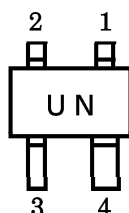
MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Gate1-Drain Voltage	V _{G1D0}	−9	V
Gate2-Drain Voltage	V _{G2D0}	−9	V
Gate1-Source Voltage	V _{G1S}	−4	V
Gate2-Source Voltage	V _{G2S}	−4	V
Gate1 Current	I _{G1}	1	mA
Gate2 Current	I _{G2}	1	mA
Power Dissipation	P _D	150	mW
Channel Temperature	T _{ch}	125	°C
Storage Temperature Range	T _{stg}	−55~125	°C



Weight : 0.013g

MARKING



ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Gate1 Leakage Current	I _{G1SS}	V _{DS} =0, V _{G1S} =−3V, V _{G2S} =0	—	—	−4	μA
Gate2 Leakage Current	I _{G2SS}	V _{DS} =0, V _{G1S} =0, V _{G2S} =−3V	—	—	−4	μA
Drain Current	I _{DSS}	V _{DS} =3V, V _{G1S} =0, V _{G2S} =0	6	—	20	mA
Gate1-Source Cut-off Voltage	V _{G1S} (OFF)	V _{DS} =3V, V _{G2S} =0, I _D =100μA	−0.7	—	−1.8	V
Gate2-Source Cut-off Voltage	V _{G2S} (OFF)	V _{DS} =3V, V _{G1S} =0, I _D =100μA	−0.7	—	−1.8	V
Forward Transfer Admittance	Y _{fs}	V _{DS} =3V, V _{G2S} =1V, I _D =5mA f=1kHz	—	19	—	ms
Input Capacitance	C _{iss}	V _{DS} =3V, V _{G2S} =1V, I _D =5mA f=1kHz	—	0.6	1.4	pF
Reverse Transfer Capacitance	C _{rss}		—	0.013	0.030	pF
Power Gain	G _{ps}	V _{DS} =3V, V _{G2S} =1V, I _D =5mA f=800MHz (Fig.1)	17	20.5	—	dB
Noise Figure	NF		—	1.0	2.0	dB

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