

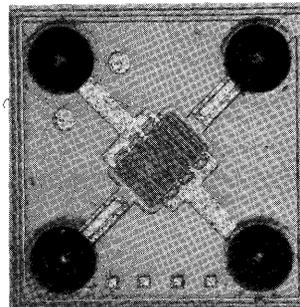
MMCF4223 (SILICON)

MMCF4224

Flip-Chip — N-channel junction field effect transistors designed for VHF amplifier and mixer applications.

- Drain and Source Interchangeable

FLIP-CHIP N-CHANNEL JUNCTION FIELD EFFECT TRANSISTORS



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MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	30	Vdc
Drain-Gate Voltage	V_{DG}	30	Vdc
Gate-Source Voltage	V_{GS}	30	Vdc
Drain Current	I_D	20	mAdc
Operating Junction Temperature	T_J	+175	°C

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Min	Max	Unit
Gate-Source Breakdown Voltage ($I_G = 10 \mu\text{A}_{dc}$, $V_{DS} = 0$)	$V_{(BR)GSS}$	30	—	Vdc
Gate Reverse Current ($V_{GS} = 20 \text{ Vdc}$, $V_{DS} = 0$)	I_{GSS}	—	0.5	nAdc
	MMCF4223	—	1.0	
	MMCF4224	—	1.0	
Gate-Source Cutoff Voltage ($V_{DS} = 15 \text{ Vdc}$, $I_D = 0.5 \text{ nAdc}$) ($V_{DS} = 15 \text{ Vdc}$, $I_D = 1.0 \text{ nAdc}$)	$V_{GS(off)}$	—	8.0	Vdc
	MMCF4223	—	8.0	
	MMCF4224	—	8.0	
Gate-Source Voltage ($V_{DS} = 15 \text{ Vdc}$, $I_D = 0.3 \text{ mAdc}$) ($V_{DS} = 15 \text{ Vdc}$, $I_D = 0.2 \text{ mAdc}$)	V_{GS}	1.0	7.0	Vdc
	MMCF4223	1.0	7.5	
	MMCF4224	1.0	7.5	
Zero-Gate Voltage Drain Current ($V_{DS} = 15 \text{ Vdc}$, $V_{GS} = 0$)	I_{DSS}	3.0	18	mAdc
	MMCF4223	2.0	20	
	MMCF4224	2.0	20	
Forward Transmittance ($V_{DS} = 15 \text{ Vdc}$, $V_{GS} = 0$, $f = 1.0 \text{ kHz}$)	$ y_{fs} $	3000	7000	μmhos
	MMCF4223	2000	7500	
	MMCF4224	2000	7500	
Input Capacitance ($V_{DS} = 15 \text{ Vdc}$, $V_{GS} = 0$, $f = 1.0 \text{ MHz}$)	C_{iss}	—	8.0	pF
Reverse Transfer Capacitance ($V_{DS} = 15 \text{ Vdc}$, $V_{GS} = 0$, $f = 1.0 \text{ MHz}$)	C_{rss}	—	3.0	pF

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