

SILICON N-CHANNEL DUAL GATE MOS-FET

Depletion type field-effect transistor in a plastic X-package with source and substrate interconnected, intended for VHF applications, such as VHF television tuners, FM tuners and professional communication equipment.

This MOS-FET tetrode is protected against excessive input voltage surges by integrated back-to-back diodes between gates and source.

QUICK REFERENCE DATA

Drain-source voltage	V_{DS}	max.	20 V
Drain current	I_D	max.	20 mA
Total power dissipation up to $T_{amb} = 75\text{ }^{\circ}\text{C}$	P_{tot}	max.	225 mW
Junction temperature	T_j	max.	150 $^{\circ}\text{C}$
Transfer admittance at $f = 1\text{ kHz}$ $I_D = 10\text{ mA}; V_{DS} = 10\text{ V}; +V_{G2-S} = 4\text{ V}$	$ y_{fs} $	typ.	14 mS
Input capacitance at gate 1; $f = 1\text{ MHz}$ $I_D = 10\text{ mA}; V_{DS} = 10\text{ V}; +V_{G2-S} = 4\text{ V}$	C_{ig1-s}	typ.	2.1 pF
Feedback capacitance at $f = 1\text{ MHz}$ $I_D = 10\text{ mA}; V_{DS} = 10\text{ V}; +V_{G2-S} = 4\text{ V}$	C_{rs}	typ.	20 fF
Noise figure at optimum source admittance $I_D = 10\text{ mA}; V_{DS} = 10\text{ V}; +V_{G2-S} = 4\text{ V}; f = 200\text{ MHz}$	F	typ.	0.7 dB

MECHANICAL DATA

Dimensions in mm

Fig.1 SOT103.

Pinning

- 1 = source
- 2 = drain
- 3 = gate 2
- 4 = gate 1

