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## SILICON N-CHANNEL DUAL GATE MOS-FET

Depletion type field-effect transistor in a plastic X-package with source and substrate interconnected, intended for use in u.h.f. applications in television 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 $T_{amb} = 75^\circ\text{C}$	$P_{tot}$	max.	225 mW
Junction temperature	$T_j$	max.	150 °C
Transfer admittance at $f = 1 \text{ kHz}$ $I_D = 7 \text{ mA}; V_{DS} = 10 \text{ V}; + V_{G2-S} = 4 \text{ V}$	$ Y_{fs} $	typ.	12 mS
Input capacitance at gate 1; $f = 1 \text{ MHz}$ $I_D = 7 \text{ mA}; V_{DS} = 10 \text{ V}; + V_{G2-S} = 4 \text{ V}$	$C_{ig1-s}$	typ.	1.8 pF
Feedback capacitance at $f = 1 \text{ MHz}$ $I_D = 7 \text{ mA}; V_{DS} = 10 \text{ V}; + V_{G2-S} = 4 \text{ V}$	$C_{rs}$	typ.	25 fF
Noise figure at $G_S = 2 \text{ mS}; B_S = B_S \text{ opt}$ $I_D = 7 \text{ mA}; V_{DS} = 10 \text{ V}; + V_{G2-S} = 4 \text{ V}; f = 800 \text{ MHz}$	$F$	typ.	2.8 dB

## MECHANICAL DATA

Fig.1 SOT103.

## Pinning:

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

