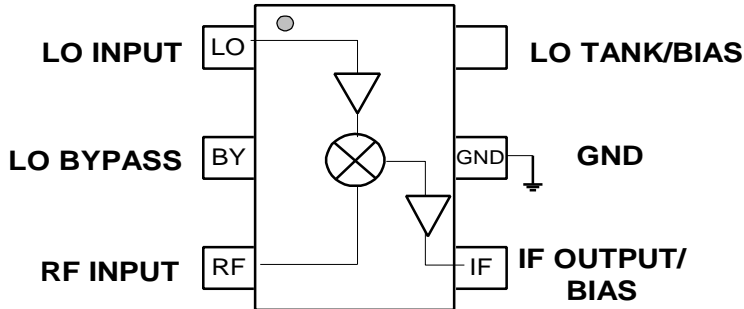


**Block Diagram**



**Product Description**

The TQ5M44 is a RFIC downconverter designed for FLEX™ and ReFLEX™ paging and mobile applications. The TQ5M44 is intended for use in the Motorola Flex chipset. The integrated circuit operates at low voltage (1V).

**Absolute Maximum Ratings**

Parameter	Min	Max	Units
DC Power Supply	0.90		V
Power Dissipation		100	mW
Operating Temperature	-40	+85	C
Storage Temperature	-55	+85	C
Signal Level on Inputs/Outputs		+20	dBm
Voltage to any Non-Supply Pin	-0.3	VDD+0.3	V

Motorola, FLEX, and ReFLEX are trademarks of Motorola, Inc.

**TQ5M44**

**RF Mixer IC**

**Features**

- Single 1V operation
- Low Current Operation
- Few external components
- High IP3
- Broadband Performance
- Small SOT 23-6 Plastic Package

**Applications**

- FLEX<sup>®</sup> wireless applications
- ReFLEX<sup>®</sup> wireless applications

# TQ5M44

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## VHF Band

### **Electrical Specifications: Devices screened to the following test conditions**

Test Conditions:  $V_{DD} = 1.0\text{ V}$ ,  $T_A = 25^\circ\text{C}$   $R_F = 132\text{-}174\text{MHz}$ ,  $L_O = 114.1\text{ - }156.1\text{MHz}$ ,  $I_F = 17.9\text{MHz}$ ,  
 $L_O = -20\text{dBm Input}$

<b>Parameter</b>	<b>Min</b>	<b>Typ</b>	<b>Max</b>	<b>Units</b>
Conversion Gain	7			dB
LO Buffer Current	250			$\mu\text{A}$
IF Buffer Current	500			$\mu\text{A}$
Total Supply Current	750		1000	$\mu\text{A}$