# **BAT17 and BAT17DS**

## **SCHOTTKY DIODES**

# SOT-23 122 (3.1) 118 (3.0) 016 (0.4) Top View (SEE 1) 250 037(0.95) .037(0.95) (SEE 1) 250 007 (SEE 1) 250 0

BAT 17DS

### **FEATURES**

- ◆ Low turn-on voltage
- ◆ Low capacitance
- Ultrafast switching
- Microminiature plastic package
- Single, double, and ring balanced mixer in narrow-band receivers up to 1 GHz
- ♦ Detectors and fast switching up to 1 GHz
- Phase detectors
- Suitable for radios, TV, CTV, and hyperband tuners
- ◆ These diodes are also available in case styles SOD-123 with type designation BAT17W, and SOD-323 with type designation BAT17WS.

### **MECHANICAL DATA**

Case: SOT-23 Plastic Package

Weight: approx. 0.008 g

Marking Code: L7 for BAT17, L72 for BAT17DS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

Dimensions in inches and (millimeters)

	SYMBOL	VALUE	UNIT
Minimum Reverse Breakdown Voltage at $10\mu\text{A}$	VR	4	Volts
Forward Current	lF	30	mA
Power Dissipation Tc= 25°C	Ptot	150 (NOTE 1)	mW
Maximum Leakage Current at $V_R = 3V$ at $V_R = 3V$ , Tamb = $60^{\circ}$ C	IR IR	0.25 1.25	μ <b>Α</b> μ <b>Α</b>
Maximum Forward Voltage at I <sub>F</sub> = 10 mA	VF	600	mV
Maximum Diodes Capacitance at V <sub>R</sub> = 0 V, f = 1 MHz	CD	1.0	pF
Thermal Resistance Junction to Ambient Air	R <sub>thja</sub>	500 (NOTE 1)	°C/W
Junction Temperature	Tj	125	°C
Storage Temperature Range	Ts	-65 to + 150	°C

### **NOTES**

(1) Valid provided that electrodes are kept at ambient temperature

