

### SMALL SIGNAL SCHOTTKY DIODES

**MiniMELF** 

#### **FEATURES**

- · Metal-on-silicon junction
- · Low turn-on voltage
- · Ultrafast switching speed
- Primarily Intended for high level UHF/VHF detection and pulse applications with broad dynamic range
- · The diode is also available in the DO-35 case with type designation BAT19,
- · High temperature soldering guaranteed:260 °C/10 seconds at terminals
- · Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

# 0. 063 (1. 6) 0. 055 (1. 4) 0. 142 (3. 6) 0. 134 (3. 4)

#### MECHANICAL DATA

Case: MiniMELF glass case(SOD-80)

Polarity: Color band denotes cathode end

Weight: Approx. 0.05 gram

Dimensions in inches and (millimeters)

## ABSOLUTE RATINGS(LIMITING VALUES)

	Symbols	Value	Units
Peak Reverse Voltage	Vrrm	10	V
Forward Continuous Current	lF	30	mA
Surge non repetitive Forward current $t_P \leqslant 1s$	IFSM	2. 0	Α
Storage temperature range	Тѕтс	-55 to+150	°C
Junction temperature	TJ	125	°C

#### **ELECTRICAL CHARACTERISTICS**

	Symbols	Min.	Тур.	Max.	Unis
Reverse breakover voltage at Iκ=10μA	VR	10			V V
Leakage current at V <sub>R</sub> =5V	l <sub>R</sub>			100	nA
Forward voltage drop at I=1mA Test pulse:tp $\leq$ 300 $\mu$ s $\delta$ $<$ 2% I=20mA	VF VF			0.40 1.0	V V
Junction Capacitance at V <sub>R</sub> =0V ,f=1GHz	CJ			1.2	pF
Thermal resistance	RθJA			400	K/W

## RATINGS AND CHARACTERISTICS CURVES LL19

Figure 1. Forward current versus forward voltage at low level(typical values)

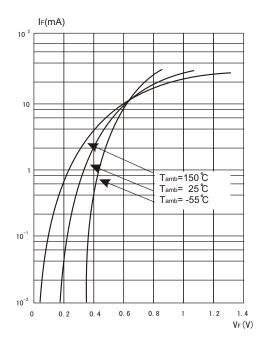


Figure 3.Reverse current versus ambient temperatures

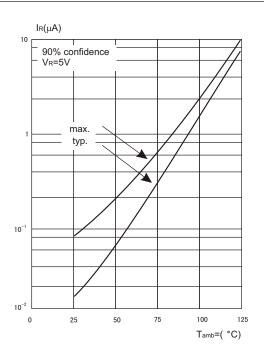


Figure 2. Capacitance CJ versus reverse applied voltage VR (typical values)

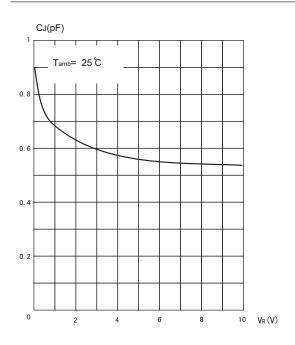
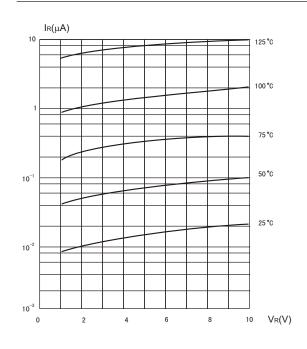


Figure 4.Reverse current versus continuous Reverse voltage(typical values)



2-40