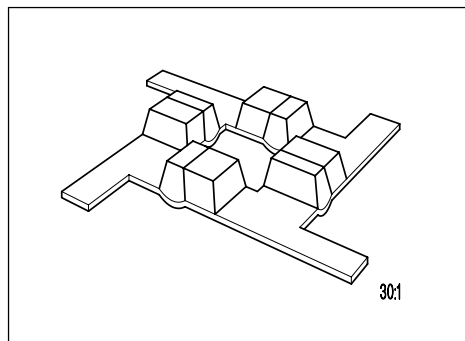




## Silicon Schottky Diodes

## BAT 15- ... R

- Beam lead technology
- Low dimension
- High performance
- Low barrier



**ESD:** Electrostatic discharge sensitive device, observe handling precautions!

Type	Marking	Ordering Code	Pin Configuration	Package <sup>1)</sup>
BAT 15-020 R	–	Q62702-D1264		R
BAT 15-050 R		Q62702-D1272		
BAT 15-090 R		Q62702-D1281		
BAT 15-110 R		Q62702-D1290		

### Maximum Ratings

Parameter	Symbol	Values		Unit
		BAT 15-020 R BAT 15-050 R	BAT 15-090 R BAT 15-110 R	
Forward current	$I_F$	100	50	mA
Junction temperature	$T_j$	175		°C
Storage temperature range	$T_{stg}$	– 65 ... + 150		
Operating temperature range	$T_{op}$	– 65 ... + 150		

1) For detailed information see chapter Package Outlines.

## Electrical Characteristics

at  $T_A = 25\text{ °C}$ , unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	

## DC Characteristics

Diode capacitance $V_R = 0, f = 1\text{ MHz}$	BAT 15-020 R BAT 15-050 R BAT 15-090 R BAT 15-110 R	$C_T$	– – – –	0.30 0.20 0.14 0.10	0.35 0.25 0.15 0.12	pF		
Forward voltage $I_F = 1\text{ mA}$	BAT 15-020 R BAT 15-050 R BAT 15-090 R BAT 15-110 R	$V_F$	– – – –	0.26 0.28 0.30 0.31	– – – –	V		
$I_F = 10\text{ mA}$	BAT 15-020 R BAT 15-050 R BAT 15-090 R BAT 15-110 R		– – – –	0.35 0.39 0.44 0.45	– – – –			
Single sideband noise figure $F_{IF} = 1.5\text{ dB}, P_{LO} = 0\text{ dBm}, f_{IF} = 10.7\text{ MHz}$	BAT 15-020 R BAT 15-050 R BAT 15-090 R BAT 15-110 R		$F_{SSB}$	– – – –	6.0 6.5 6.5 7.0		– – – –	dB
$f = 3.0\text{ GHz}$	BAT 15-020 R			–	6.0		–	
$f = 6.0\text{ GHz}$	BAT 15-050 R			–	6.5		–	
$f = 9.3\text{ GHz}$	BAT 15-090 R			–	6.5		–	
$f = 16\text{ GHz}$	BAT 15-110 R		–	7.0	–			
Differential forward resistance $I_F = 10\text{ mA}$	BAT 15-020 R BAT 15-050 R		$r_f$	– –	3.5 4.0		– –	$\Omega$
$I_F = 50\text{ mA}$	BAT 15-090 R BAT 15-110 R	– –		7.0 10.0	– –			