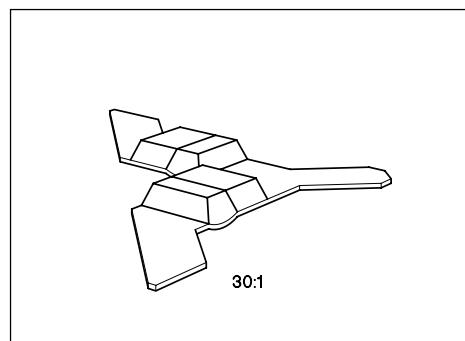


## Silicon Schottky Diodes

## BAT 15- ... D

- 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 D	–	Q62702-D1263		D
BAT 15-050 D		Q62702-D3450		
BAT 15-090 D		Q62702-D1280		
BAT 15-110 D		Q62702-D1289		

### Maximum Ratings

Parameter	Symbol	Values		Unit
		BAT 15-020 D BAT 15-050 D	BAT 15-090 D BAT 15-110 D	
Reverse voltage	$V_R$	4	4	V
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  $T_A = 25\text{ }^\circ\text{C}$ , unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	

## DC Characteristics

Breakdown voltage $I_R = 10\text{ }\mu\text{A}$		$V_{(BR)}$	4	–	–	V
Diode capacitance $V_R = 0, f = 1\text{ MHz}$	BAT 15-020 D BAT 15-050 D BAT 15-090 D BAT 15-110 D	$C_T$	–	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 D BAT 15-050 D BAT 15-090 D BAT 15-110 D	$V_F$	–	0.26	–	V
$I_F = 10\text{ mA}$	BAT 15-020 D		–	0.28	–	
	BAT 15-050 D		–	0.30	–	
	BAT 15-090 D		–	0.31	–	
	BAT 15-110 D	–	0.35	–		
Single sideband noise figure $F_{IF} = 1.5\text{ dB}, P_{LO} = 0\text{ dBm}, f_{IF} = 10.7\text{ MHz}$	$f = 3.0\text{ GHz}$ BAT 15-020 D	$F_{SSB}$	–	6.0	–	dB
	$f = 6.0\text{ GHz}$ BAT 15-050 D		–	6.5	–	
	$f = 9.3\text{ GHz}$ BAT 15-090 D		–	6.5	–	
	$f = 16\text{ GHz}$ BAT 15-110 D		–	7.0	–	
Differential forward resistance $I_F = 10\text{ mA}$	BAT 15-020 D BAT 15-050 D	$r_f$	–	3.5 4.0	–	$\Omega$
$I_F = 50\text{ mA}$	BAT 15-090 D		–	7.0	–	
	BAT 15-110 D		–	10.0	–	