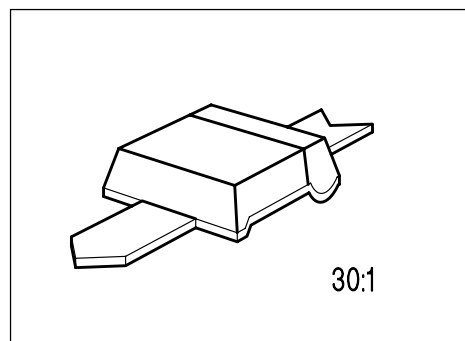


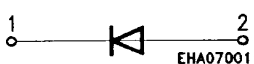
Silicon PIN Diodes

BXY 42BA-S
BXY 42BB-S

- Beam lead version
- Fast switching



ESD: Electrostatic discharge sensitive device, observe handling precautions!

Type	Marking	Ordering Code	Pin Configuration	Package ¹⁾
BXY 42BA-S	–	Q62702-X151	Pointed cathode 	S
BXY 42BB-S		Q62702-X159		

Maximum Ratings

Parameter	Symbol	Values		Unit
		BXY 42BA-S	BXY 42BB-S	
Reverse voltage	V_R	50	30	V
Junction temperature	T_j	175		°C
Storage temperature range	T_{stg}	– 55 ... + 150		
Operating temperature range	T_{op}	– 55 ... + 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.	
Breakdown voltage $I_R = 10\text{ }\mu\text{A}$	$V_{(BR)}$	50	–	–	V
Forward voltage $I_F = 50\text{ mA}$	V_F	–	1.0	–	
Reverse current $V_R = 40\text{ V}$	I_R	–	–	5	nA
Storage time $I_F = 10\text{ mA}$, $V_R = 10\text{ V}$	t_s	–	3	–	ns
Diode capacitance $V_R = 30\text{ V}$, $f = 1\text{ MHz}$	C_T	–	–	0.08	pF
Charge carrier life time $I_F = 10\text{ mA}$, $I_R = 6\text{ mA}$	τ_L	–	30	–	ns
Forward resistance $f = 100\text{ MHz}$, $I_F = 10\text{ mA}$	r_f	–	1.8	–	Ω

Electrical Characteristics

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Breakdown voltage $I_R = 10\text{ }\mu\text{A}$	$V_{(BR)}$	30	–	–	V
Forward voltage $I_F = 50\text{ mA}$	V_F	–	1.1	–	
Reverse current $V_R = 20\text{ V}$	I_R	–	–	5	nA
Storage time $I_F = 10\text{ mA}$, $V_R = 10\text{ V}$	t_s	–	2	–	ns
Diode capacitance $V_R = 20\text{ V}$, $f = 1\text{ MHz}$	C_T	–	–	0.15	pF
Charge carrier life time $I_F = 10\text{ mA}$, $I_R = 6\text{ mA}$	τ_L	–	20	–	ns
Forward resistance $f = 100\text{ MHz}$, $I_F = 10\text{ mA}$	r_f	–	1.3	–	Ω