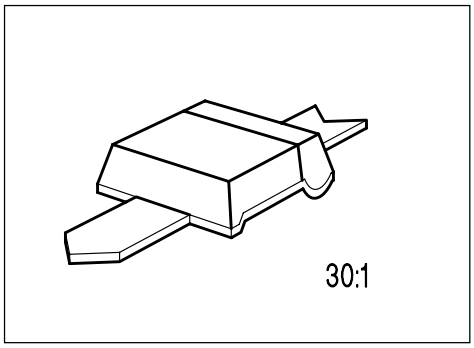
SIEMENS

Silicon PIN Diodes

BXY 42BA-S
BXY 42BB-S

- Beam lead version
- Fast switching



ESD: **E**lectro**s**tatic **d**ischarge 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 °C, unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Breakdown voltage I_R = 10 µA	$V_{(BR)}$	50	–	–	V
Forward voltage I_F = 50 mA	V_F	–	1.0	–	
Reverse current V_R = 40 V	I_R	–	–	5	nA
Storage time I_F = 10 mA, V_R = 10 V	t_s	–	3	–	ns
Diode capacitance V_R = 30 V, f = 1 MHz	C_T	–	–	0.08	pF
Charge carrier life time I_F = 10 mA, I_R = 6 mA	τ_L	–	30	–	ns
Forward resistance f= 100 MHz, I_F = 10 mA	r_f	–	1.8	–	Ω

Electrical Characteristics
at T_A = 25 °C, unless otherwise specified.

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