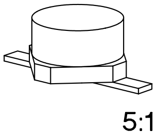
SIEMENS

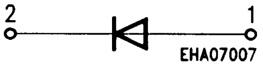
Silicon PIN Diode

BXY 42BA-7

- Fast switching



ESD: Electro**s**tatic **d**ischarge sensitive device, observe handling precautions!

Type	Marking	Ordering Code	Pin Configuration	Package[1]
BXY 42BA-7	27	Q62702-X160		Cerec-X

Maximum Ratings

Parameter	Symbol	Values	Unit
Reverse voltage	V_R	50	V
Peak forward current, t_p = 1 µs	I_{FRM}	5	A
Total power dissipation	P_{tot}	350	mW
Junction temperature	T_j	175	˚C
Storage temperature range	T_{stg}	– 55 … + 150	
Operating temperature range	T_{op}	– 55 … + 150	

Thermal Resistance

Junction – ambient[2]	$R_{th\ JA}$	≤ 450	K/W

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[1] For detailed information see chapter Package Outlines.

[2] Package mounted on alumina 15 mm × 16.7 mm × 0.7 mm.

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
Reverse current V_R = 40 V	I_R	–	–	5	nA
Storage time I_F = 10 mA, V_R = 10 V	t_s	–	4	–	ns
Diode capacitance V_R = 20 V, f = 1 MHz	C_T	–	–	0.2	pF
Charge carrier life time I_F = 10 mA, I_R = 6 mA	τ_L	–	40	–	ns
Forward resistance f = 100 MHz, I_F = 10 mA	r_f	–	1.5	–	Ω