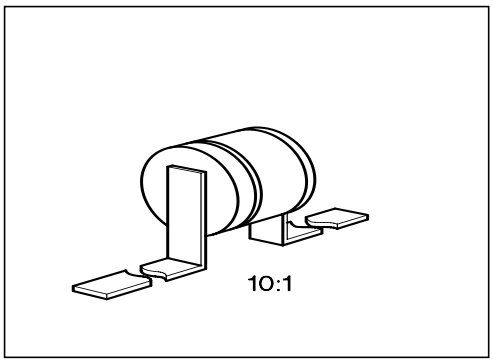
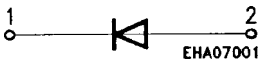
SIEMENS

Silicon PIN Diode

BXY 44K

- Microwave attenuator diode
- Linear RF characteristic



Type	Marking	Ordering Code	Pin Configuration	Package[1)]
BXY 44K	–	Q62702-X148	Cathode: black dot, heat sink 	T1

Maximum Ratings

Parameter	Symbol	Values	Unit
Reverse voltage	V_R	200	V
Forward current	I_F	0.5	A
Peak forward current, t_p =1 µs	I_{FRM}	20	
Total power dissipation	P_{tot}	600	mW
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 °C, unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Breakdown voltage I_R = 10 µA	$V_{(BR)}$	200	–	–	V
Forward voltage I_R = 100 mA	V_F	–	–	1	
Reverse current V_R = 100 V	I_R	–	–	10	nA
Storage time I_F = 10 mA, V_R = 10 V	t_s	–	50	–	ns
Diode capacitance V_R = 50 V, f = 1 MHz	C_T	–	–	0.4	pF
Case capacitance	C_C	–	0.1	–	
Charge carrier life time I_F = 10 mA, I_R = 6 mA	τ_L	–	0.5	–	µs
Forward resistance f= 100 MHz, I_F = 10 µA f= 100 MHz, I_F = 1 mA f= 100 MHz, I_F = 10 mA	r_f	 – – –	 1000 25 3.5	 – – –	Ω