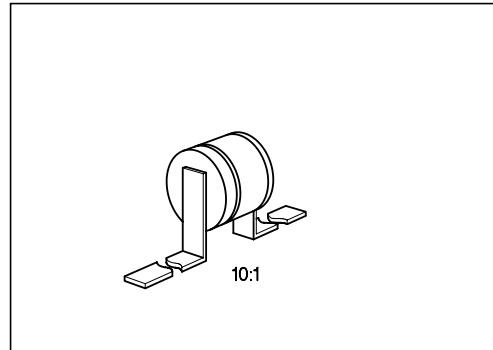


## Silicon PIN Diode

BXY 42BA-3

- Fast switching
- In stripline package other lead configurations available



**ESD:** Electrostatic discharge sensitive device, observe handling precautions!

Type	Marking	Ordering Code	Pin Configuration	Package <sup>1)</sup>
BXY 42BA-3	–	Q62702-X143	Cathode: black dot, heat sink 	T1

### Maximum Ratings

Parameter	Symbol	Values	Unit
Reverse voltage	$V_R$	50	V
Peak forward current, $t_p = 1 \mu\text{s}$	$I_{FPM}$	5	A
Total power dissipation	$P_{tot}$	350	mW
Junction temperature	$T_j$	175	$^{\circ}\text{C}$
Storage temperature range	$T_{stg}$	– 55 ... + 150	
Operating temperature range	$T_{op}$	– 55 ... + 150	

### Thermal Resistance

Junction - ambient	$R_{th JA}$	$\leq 450$	K/W
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<sup>1)</sup> For detailed information see chapter Package Outlines.

**Electrical Characteristics**at  $T_A = 25^\circ\text{C}$ , unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Breakdown voltage $I_R = 10 \mu\text{A}$	$V_{(\text{BR})}$	50	—	—	V
Reverse current $V_R = 40 \text{ V}$	$I_R$	—	—	5	nA
Storage time $I_F = 10 \text{ mA}, V_R = 10 \text{ V}$	$t_s$	—	4	—	ns
Diode capacitance $V_R = 20 \text{ V}, f = 1 \text{ MHz}$	$C_T$	—	—	0.24	pF
Charge carrier life time $I_F = 10 \text{ mA}, I_R = 6 \text{ mA}$	$\tau_L$	—	40	—	ns
Forward resistance $f = 100 \text{ MHz}, I_F = 10 \text{ mA}$	$r_f$	—	1.5	—	$\Omega$