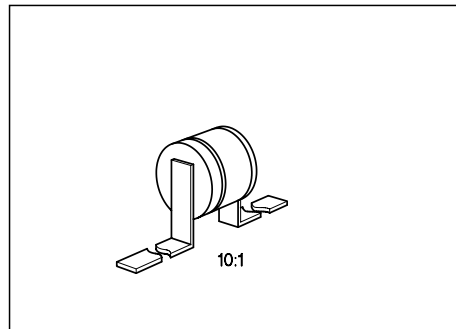



## Silicon PIN Diode

**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, $t_p = 1 \mu s$	$I_{FRM}$	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	$R_{th JA}$	≤ 450	K/W
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<sup>1)</sup> For detailed information see chapter Package Outlines.

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

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Breakdown voltage $I_R = 10\ \mu\text{A}$	$V_{(BR)}$	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	–	$\Omega$