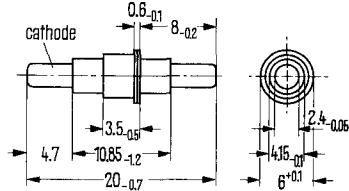


Depletion-layer varactors

BXY 21 CA is an epitaxial silicon mesa diode in a ceramic case. It is suitable for use as frequency converter and mixer in the GHz range.

Type	Order number
BXY 21 CA	Q 62702-X 54



Weight approx. 1.4 g Dimensions in mm

Maximum ratings ($T_{amb} = 25\text{ }^{\circ}\text{C}$)

Reverse voltage
 Junction temperature
 Storage temperature
 Power dissipation

Thermal resistance
 Junction to case

	BXY 21 CA	
V_R	20	V
T_j	150	$^{\circ}\text{C}$
T_S	-55 to +150	$^{\circ}\text{C}$
P_{tot}	1.2	W
$R_{thJcase}$	≤ 70	K/W

Static characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$)

Forward voltage ($I_F = 100\text{ mA}$)
 Reverse current ($V_R = 15\text{ V}$)
 Breakdown voltage ($I_R = 10\text{ }\mu\text{A}$)

V_F	≤ 1.1	V
I_R	≤ 5	nA
V_{BR}	30 (>20)	V

Dynamic characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$)

Diode capacitance ($V_R = 0\text{ V}$; $f = 1\text{ MHz}$)
 Case capacitance
 Series inductance
 Series resistance ($V_R = 20\text{ V}$; $f = 2.4\text{ GHz}$)

C_D	2 (1.5 to 2.5)	pf
C_{case}	0.85	pf
L_S	2	nH
R_S	0.5 (<0.8)	Ω