

- ◆ Small Insertion Loss
- ◆ High Isolation
- ◆ High Power Handling

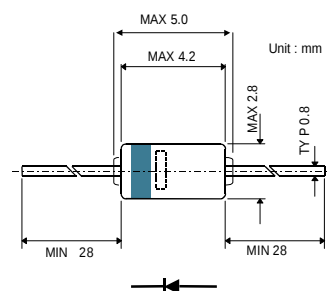
General Description

The XB15A402 PIN diode employs a high reliability glass package that is designed for solid state antenna switches used in commercial two-way radios.

Applications

- High Power Antenna Switch (25W output two-way radio)

Dimensions



JEDEC DO-41

Absolute Maximum Ratings

Ta=25°C

SYMBOL	PARAMETER	RATINGS	UNITS
VRM	Repetitive Peak Reverse Voltage	270	V
IFSM *	Forward Surge Current	2	A
P	Power Dissipation	1	W
Tj	Junction Temperature	175	°C
Tstg	Storage Temperature	-55 to 175	°C

* t = 5sec

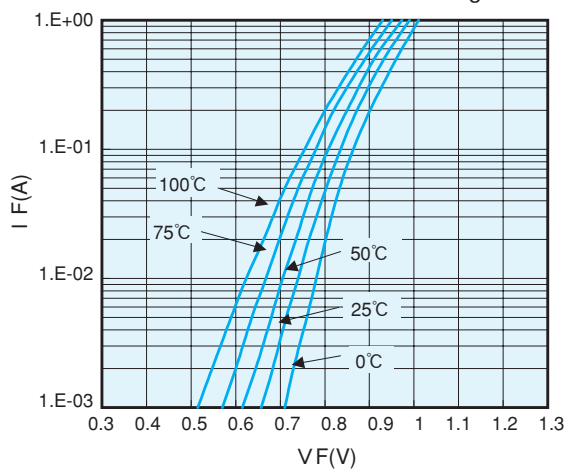
Electrical characteristics

Ta=25°C

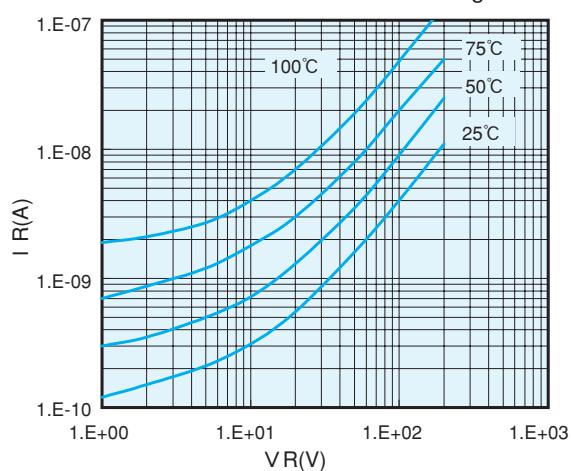
SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNITS
			MIN	TYP	MAX	
IR1	Reverse Current	VR = 270V			10	μA
IR2		VR = 200V			150	nA
IF	Forward Current	VF = 1.0V	500			mA
Ct	Diode Capacitance	VR = 12V, f = 1MHz		2.0	3.0	pF
rfs	Forward Series Resistance	IF = 50mA, f = 470MHz		0.5	0.7	Ω
fc	Cut-off Frequency	VR = 12V, f = 50MHz	1.0			GHz

Electrical Characteristics

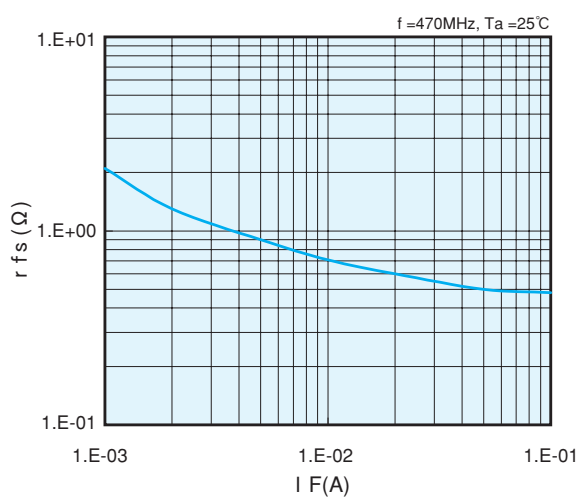
Forward Current vs. Forward Voltage



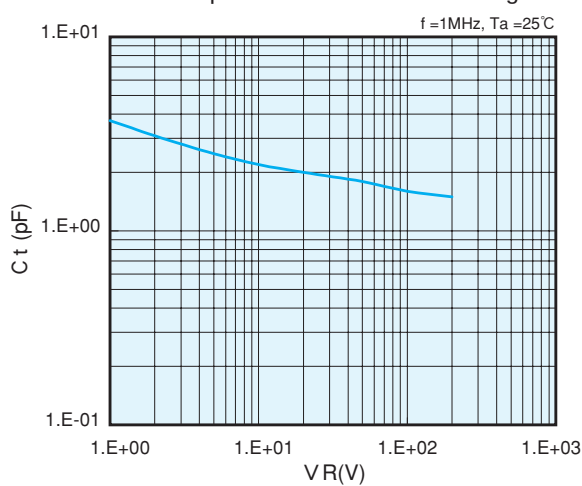
Reverse Current vs. Reverse Voltage



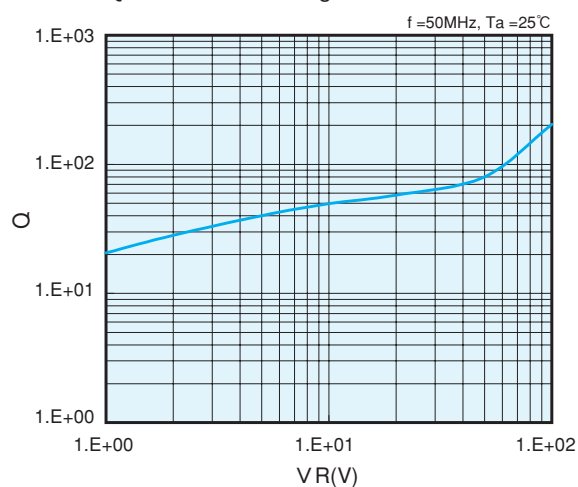
Forward Series Resistance vs. Forward Current



Diode Capacitance vs. Reverse Voltage



Q vs. Reverse Voltage



Ordering Information

WIDTH (mm)	TYPE	MINIMUM ORDER UNIT	ORDERING
26	Taping	2000 pcs./ Ammo Pack Box	XB15A****GT
52	Taping	2000 pcs./ Ammo Pack Box	XB15A****GT
52	Taping Reel	5000 pcs./ Reel	XB15A****GR
52	Bulk	100 pcs./ Bag x 10 Bags	XB15A****GB
12	Embossed tape	1500 pcs./ Reel	XB15A****HR

XB15 $\overline{O} \overline{OOO} \overline{O} \overline{O} \overline{O} \overline{O}$
 $\uparrow \quad \uparrow \quad \uparrow \quad \uparrow \quad \uparrow \quad \uparrow$
a b c d e f

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
a	Development order (A...)	c	Version
b	Series :	d	Lead length : 0 : No lead 1 : Short lead (26mm) 2 : Long lead (52mm)
	105	e	Package type : G : Glass shield H : Ceramic (no lead)
	204		
	301		
	303	f	Taping method : B : Bag T : Paper tape R : Embossed tape (no lead)
	308		
	402		
	407		
	709		

Note : With the 26mm width, only the XB15A105, XB15A204 and XB15A301 are available in the taping format.
Please further note that the XB15A105 has a 'Minimum Order Unit' of 5000 pcs./ Box and not 2000.

Taping Specification

Axial Taping

