

- ◆ Small Insertion Loss
- ◆ High Isolation
- ◆ Small Glass Package

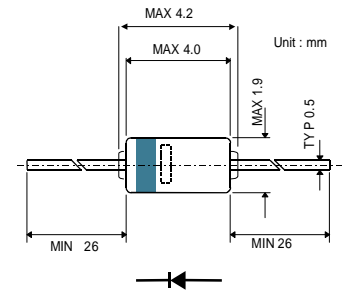
■ Applications

- Antenna Switch

■ General Description

The XB15A301 PIN diode employs a high reliability glass package that is designed for solid state antenna switches used in commercial two-way radios.

■ Dimensions



JEDEC DO-35

■ Absolute Maximum Ratings

Ta=25°C

SYMBOL	PARAMETER	RATINGS	UNITS
V _{RM}	Repetitive Peak Reverse Voltage	80	V
I _{FSM} *	Forward Surge Current	2	A
P	Power Dissipation	350	mW
T _j	Junction Temperature	175	°C
T _{stg}	Storage Temperature	-55 to 175	°C

* t = 1sec

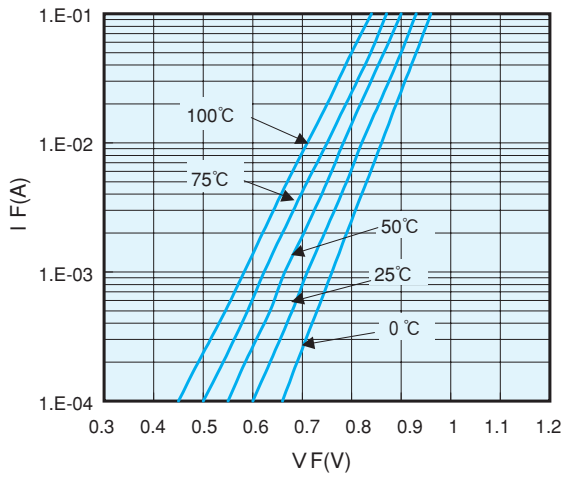
■ Electrical characteristics

Ta=25°C

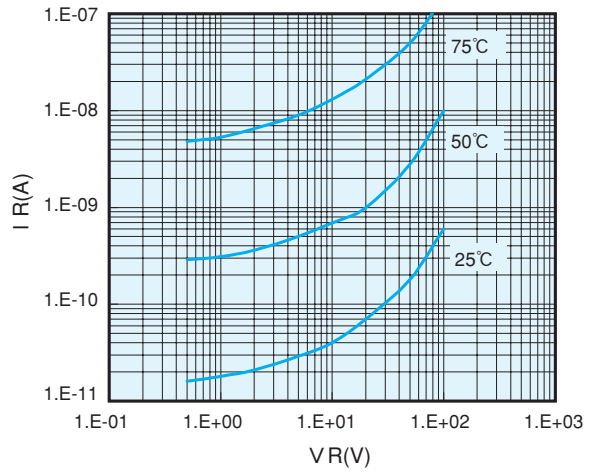
SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNITS
			MIN	TYP	MAX	
I _R	Reverse Current	V _R = 60V			150	nA
V(BR)R	Reverse Breakdown Voltage	I _R = 10μA	80			V
I _F	Forward Current	V _F = 1.0V	100			mA
C _t	Diode Capacitance	V _R = 0V, f = 1MHz		2.0	3.0	pF
r _{fs}	Forward Series Resistance	I _F = 20mA, f = 470MHz		0.8	1.2	Ω
Q	Q	V _R = 0V, f = 50MHz	20.0			-
LS	Lead Inductance	Total Lead Length 10mm		2.5		nH

Electrical Characteristics

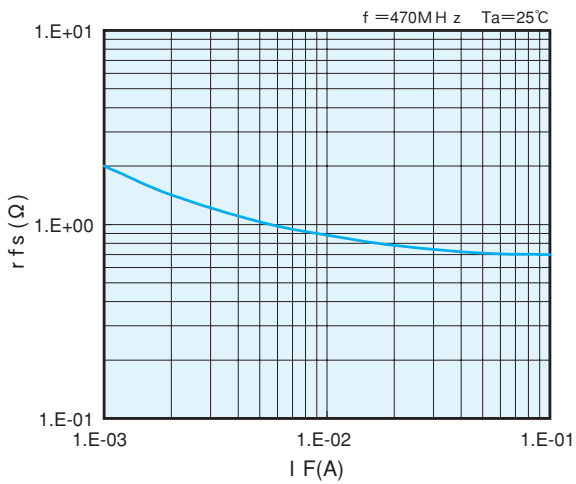
Forward Current vs. Forward Voltage



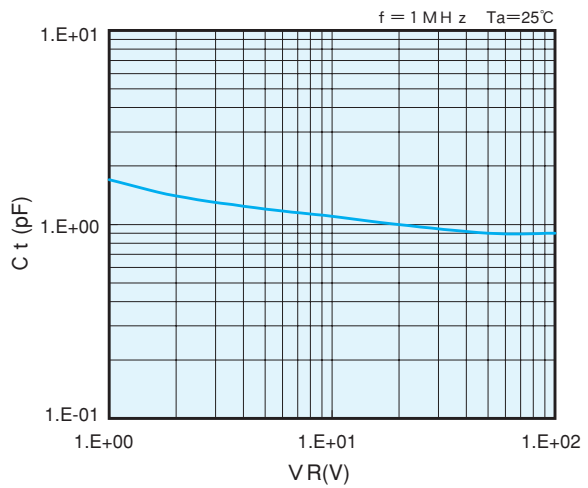
Reverse Current vs. Reverse Voltage



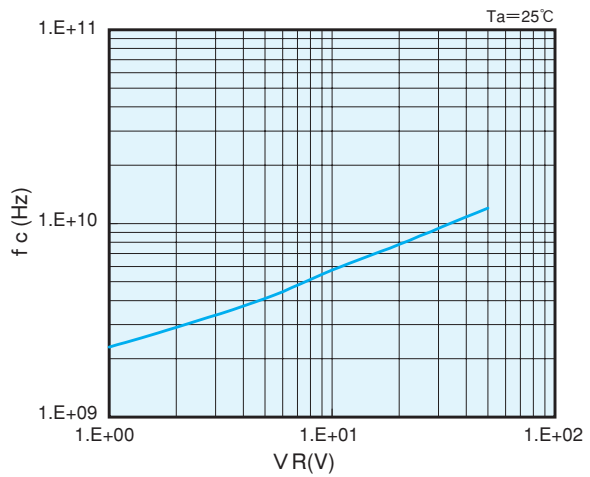
Forward Series Resistance vs. Forward Current



Diode Capacitance vs. Reverse Voltage

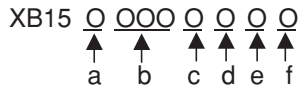


Cut-Off Frequency vs. Reverse Voltage



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



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

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

