

- ◆ Long Carrier Lifetime
- ◆ Low Distortion
- ◆ Large Dynamic Range

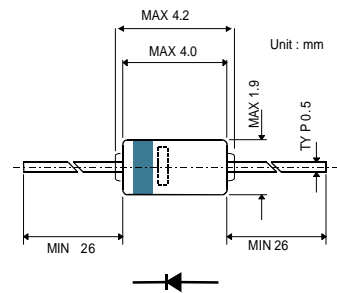
### ■ Applications

- Car Radio RF Attenuators
- Filter Switches
- CATV RF Attenuators

### ■ General Description

The XB15A204 PIN diode employs a high reliability glass package that is designed for RF small signal attenuators in VHF, UHF appliances.

### ■ Dimensions



JEDEC DO-35

### ■ Absolute Maximum Ratings

Ta=25 °C

SYMBOL	PARAMETER	RATINGS	UNITS
V <sub>RM</sub>	Repetitive Peak Reverse Voltage	30	V
V <sub>R</sub>	Reverse Voltage	28	V
P	Power Dissipation	200	mW
T <sub>j</sub>	Junction Temperature	175	°C
T <sub>stg</sub>	Storage Temperature	-55 to 175	°C
I <sub>FM</sub>	Forward Current	150	mA

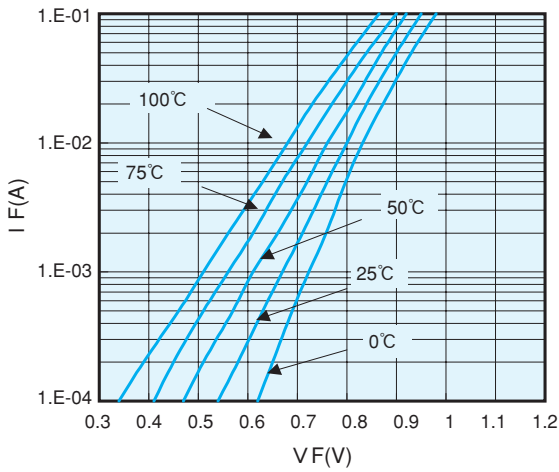
### ■ Electrical characteristics

Ta=25°C

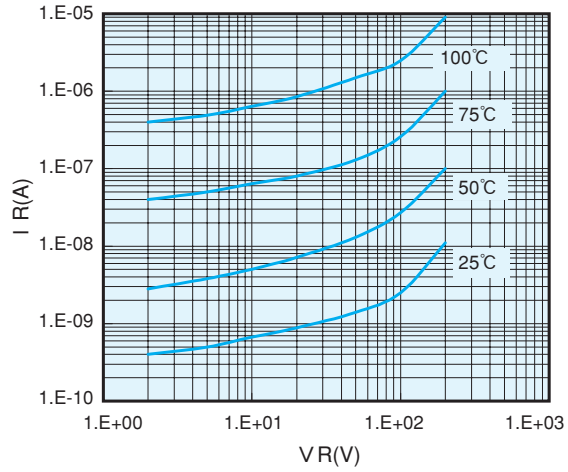
SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNITS
			MIN	TYP	MAX	
I <sub>R1</sub>	Reverse Current	V <sub>R</sub> = 30V			10	μA
I <sub>R2</sub>		V <sub>R</sub> = 28V			0.5	μA
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> = 100mA			1.0	V
r <sub>fs1</sub>	Forward Series Resistance	I <sub>F</sub> = 10mA, f = 50MHz		5.5	10	Ω
r <sub>fs2</sub>		I <sub>F</sub> = 10μA, f = 50MHz	1.0	2.0		kΩ
C <sub>t</sub>	Diode Capacitance	V <sub>R</sub> = 15V, f = 1.0MHz		0.7	1.2	pF
	Life Time	I <sub>F</sub> = 10mA		2.1		μS
t <sub>s</sub>	Storage Time	I <sub>F</sub> = 10mA, I <sub>R</sub> = 10mA	0.6	1.5		μS

## Electrical Characteristics

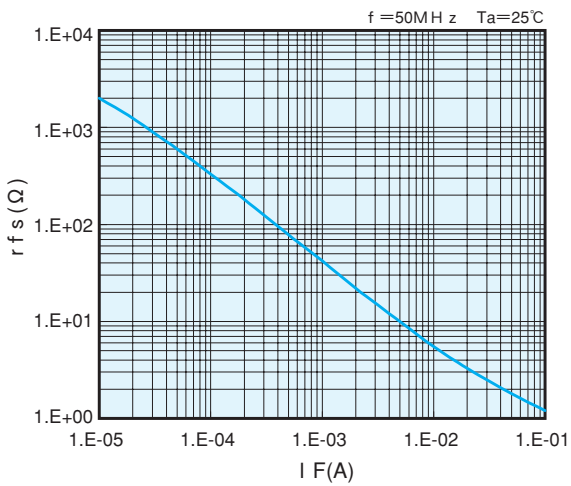
Forward Current vs. Forward Voltage



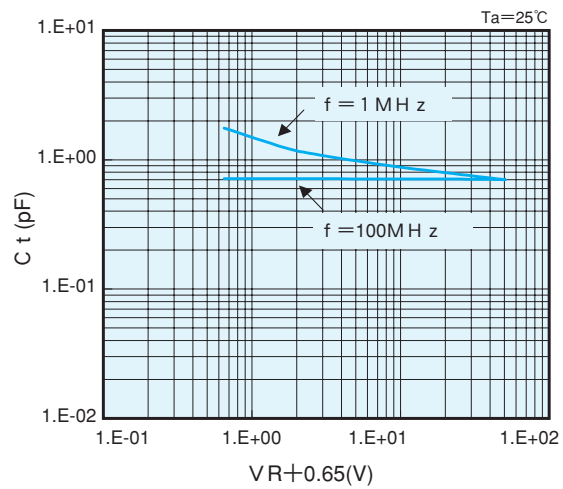
Reverse Current vs. Reverse Voltage



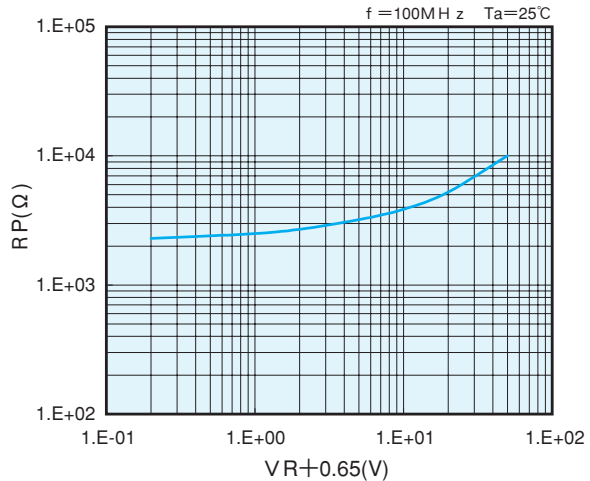
Forward Series Resistance vs. Forward Current



Diode Capacitance vs. Reverse Voltage

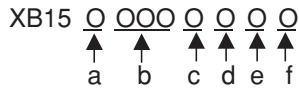


Parallel Resistance vs. Reverse Voltage



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)	
e	303	Package type :	G : Glass shield
	308		H : Ceramic (no lead)
	402		
	407		
709	f	Taping method :	
		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

