

XB15A105



PIN DIODE

- ◆ Long Carrier Lifetime
- ◆ Small Diode Capacitance (0.36pF at VR=0V, f=100MHz)
- ◆ Small Series Order Resistance
- ◆ Highly Surge-proof
- ◆ Small Glass Package

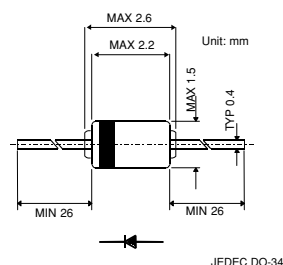
Applications

- VCRs
- Video Disks
- Antenna Switches

General Description

The XB15A105 PIN diode employs a high reliability glass package that is designed for small signal switching.

Dimensions



Absolute Maximum Ratings

Ta=25°C

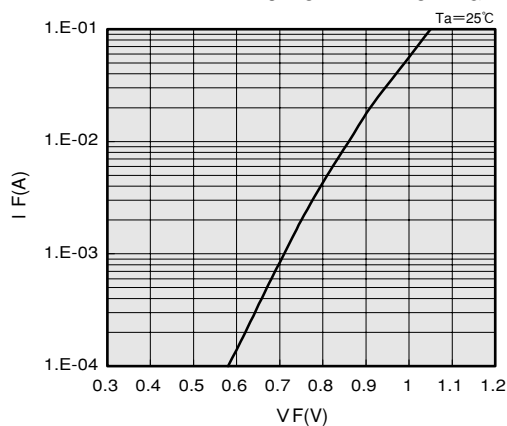
SYMBOL	PARAMETER	RATINGS	UNITS
VRM	Repetitive Peak Reverse Voltage	30	V
VR	Reverse Voltage	30	V
P	Power Dissipation	200	mW
Tj	Junction Temperature	175	°C
Tstg	Storage Temperature	-55 ~ 175	°C
IFM	Forward Current	150	mA

Electrical Characteristics

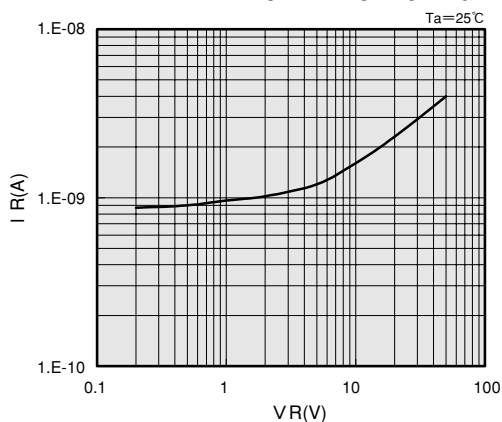
Ta=25°C

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNITS
			MIN	TYP	MAX	
IR1	Reverse Current	VR = 30V			10	μA
IR2		VR = 28V			0.5	μA
IF	Forward Current	VF = 1.0V	30			mA
Ct	Diode Capacitance	VR = 0V, f = 100MHz		0.36	0.5	pF
rfs1	Forward Series Resistance	IF = 10mA, f = 50MHz		10	20	Ω
rfs2		IF = 10μA, f = 50MHz	1.0	3.0		kΩ

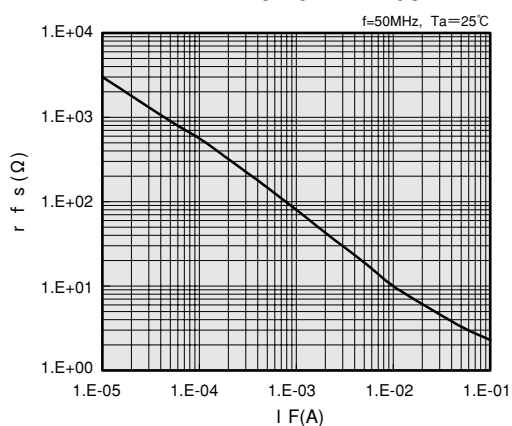
FORWARD CURRENT
vs. FORWARD VOLTAGE



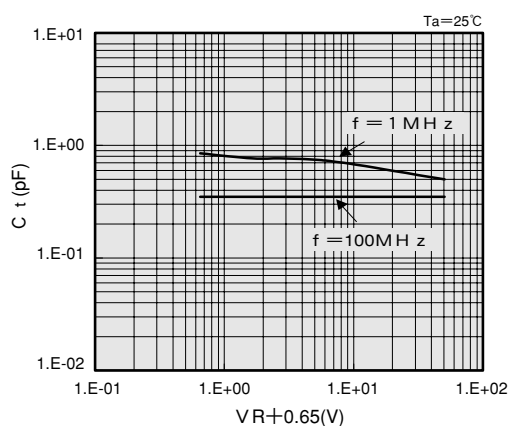
REVERSE CURRENT
vs. REVERSE VOLTAGE



FORWARD SERIES RESISTANCE
vs. FORWARD CURRENT



DIODE CAPACITANCE
vs. REVERSE VOLTAGE



PARALLEL RESISTANCE
vs. REVERSE VOLTAGE

