

XB15A303



PIN DIODE

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

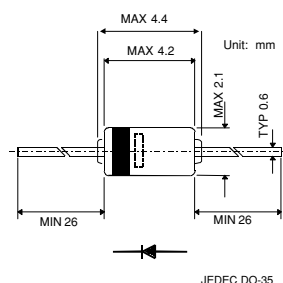
Applications

- Antenna Switch

General Description

The XB15A303 PIN diode employs a high reliability glass package that is designed for solid state antenna switches used in commercial two-way radios.

Dimensions



Absolute Maximum Ratings

Ta=25 °C

SYMBOL	PARAMETER	RATINGS	UNITS
VRM	Repetitive Peak Reverse Voltage	180	V
IFSM *	Forward Surge Current	2	A
P	Power Dissipation	500	mW
Tj	Junction Temperature	175	°C
Tstg	Storage Temperature	-55 ~ 175	°C

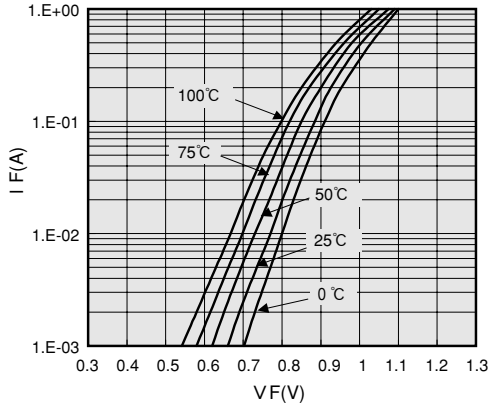
* t = 5sec

Electrical Characteristics

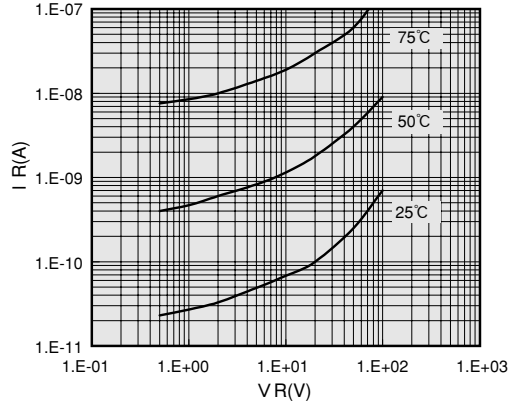
Ta=25°C

SYMBOL	PARAMETER	TEST CONDITIONS	LIMITS			UNITS
			MIN	TYP	MAX	
IR1	Reverse Current	VR = 180V			10	μA
IR2		VR = 140V			150	nA
IF	Forward Current	VF = 1.0V	200			mA
Ct	Diode Capacitance	VR = 0V, f = 1MHz		3.0	4.0	pF
rfs	Forward Series Resistance	IF = 20mA, f = 470MHz		0.6	1.0	Ω
fc	Cut-off Frequency	VR = 3V, f = 50MHz	900			MHz

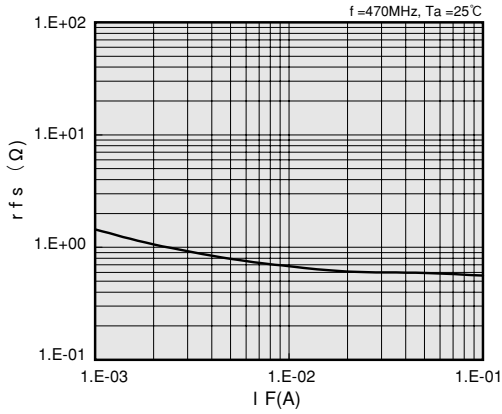
FORWARD CURRENT
vs. FORWARD VOLTAGE



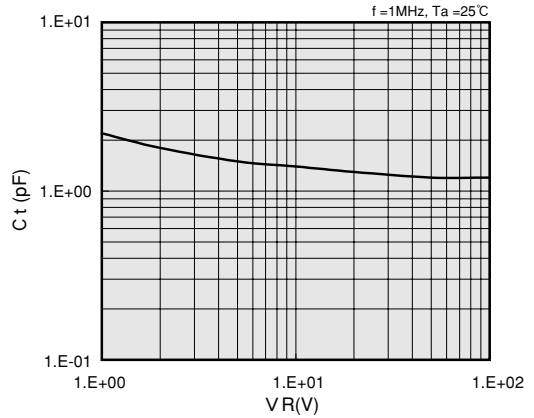
REVERSE CURRENT
vs. REVERSE VOLTAGE



FORWARD SERIES RESISTANCE
vs. FORWARD CURRENT



DIODE CAPACITANCE
vs. REVERSE VOLTAGE



CUT-OFF FREQUENCY
vs. REVERSE VOLTAGE

