

XB15A402



PIN DIODE

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

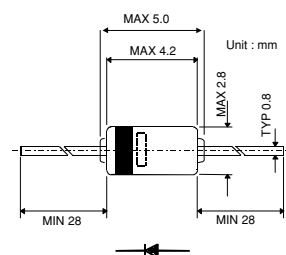
Applications

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

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.

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 ~ 175	°C

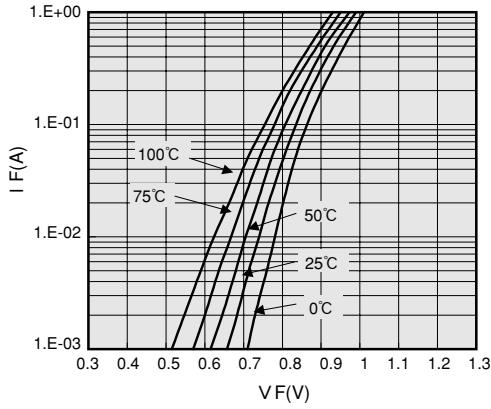
* t = 5sec

Electrical Characteristics

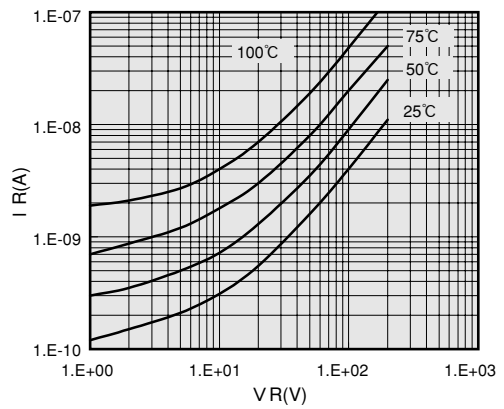
Ta=25°C

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

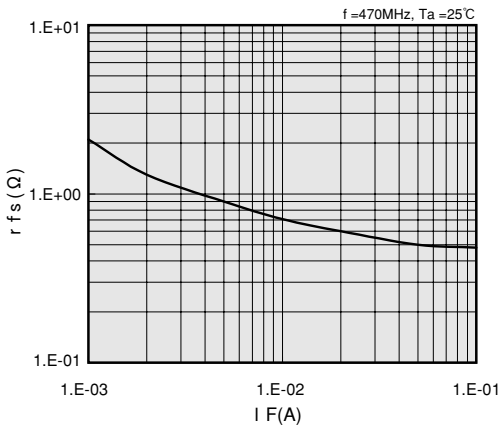
FORWARD CURRENT
vs. FORWARD VOLTAGE



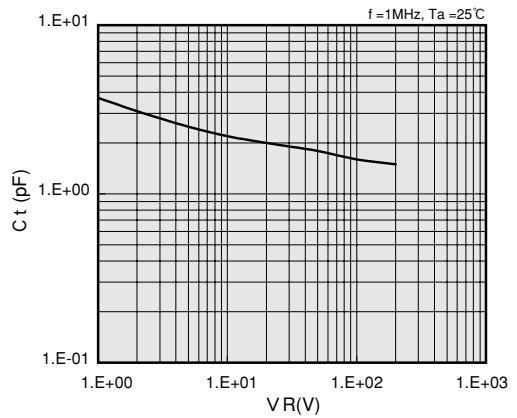
REVERSE CURRENT
vs. REVERSE VOLTAGE



FORWARD SERIES RESISTANCE
vs. FORWARD CURRENT



DIODE CAPACITANCE
vs. REVERSE VOLTAGE



Q vs. REVERSE VOLTAGE

