XB15A303

TOREX

PIN DIODE

◆Small Insertion Loss
◆High Isolation
◆Small Glass Package

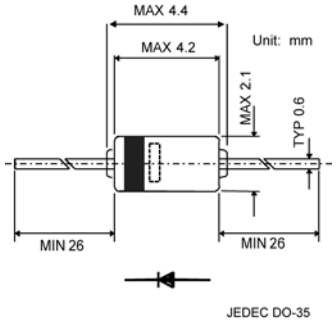
■APPLICATIONs

●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℃

PARAMETER	SYMBOL	RATINGS	UNITS
Repetitive Peak Reverse Voltage	V_{RM}	180	V
Forward Surge Current	I_{FSM} *	2	A
Power Dissipation	P	500	mW
Junction Temperature	Tj	175	℃
Storage Temperature Range	Tstg	-55～175	℃

* t = 5sec

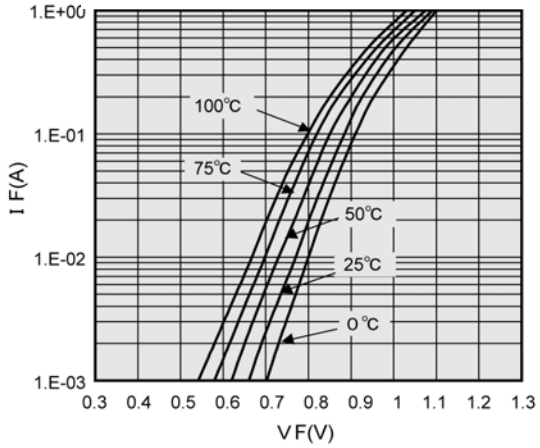
■ELECTRICAL CHARACTERISTICS

Ta = 25℃

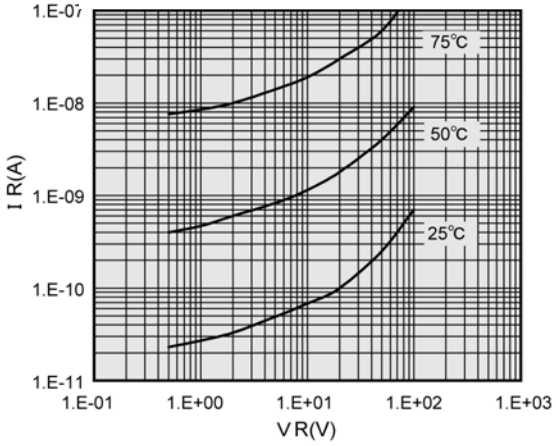
PARAMETER	SYMBOL	CONDITIONS	LIMITS			UNITS
			MIN.	TYP.	MAX.	
Reverse Current	I_{R1}	V_R = 180V	-	-	10	μA
	I_{R2}	V_R = 140V	-	-	150	nA
Forward Current	I_F	V_F = 1.0V	200	-	-	mA
Diode Capacitance	Ct	V_R = 0V, f = 1MHz	-	3.0	4.0	pF
Forward Series Resistance	rfs	I_F = 20mA, f = 470MHz	-	0.6	1.0	Ω
Cut-Off Frequency	fc	V_R = 3V, f = 50MHz	900	-	-	MHz

■TYPICAL PERFORMANCE CHARACTERISTICS

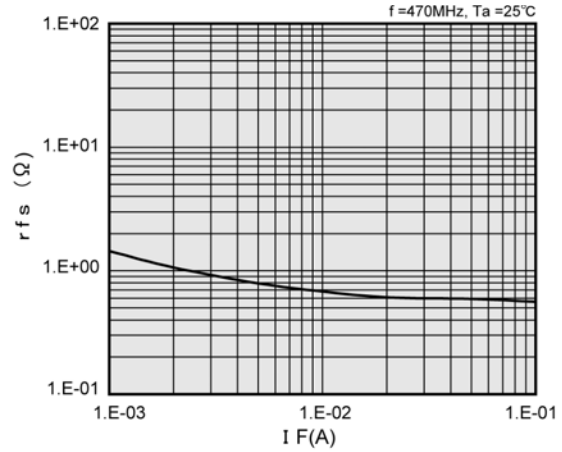
(1) Forward Current vs. Forward Voltage



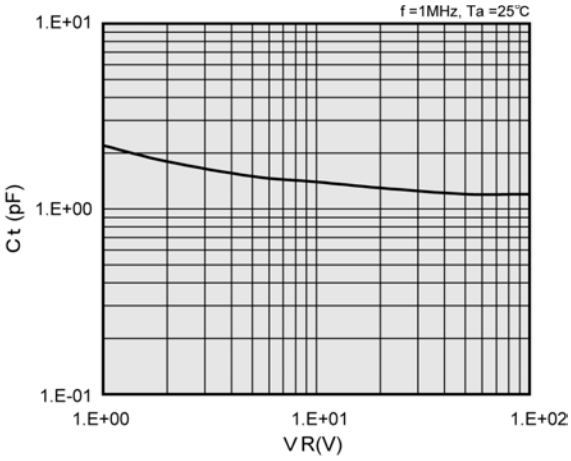
(2) Reverse Current vs. Reverse Voltage



(3) Forward Series Resistance vs. Forward Current



(4) Diode Capacitance vs. Reverse Voltage



(5) Cut-Off Frequency vs. Reverse Voltage