XB0ASB03A1BR

TOREX

Schottky Barrier Diode 500mA 30V Type

◆500mA, 30V Type
◆Low VF, Actual Power =400mV @500mA
◆Small Package : SOD-323

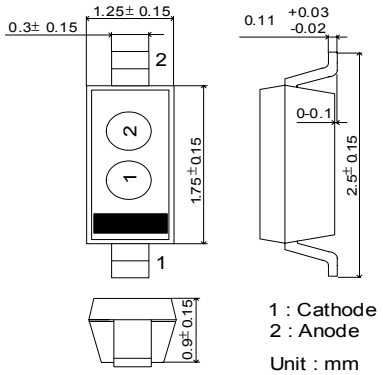
■APPLICATIONS

●Rectification of compact DC/DC converter
●Surge absorption caused by counter force of compact motors
●Protection against reverse connection of battery

■GENERAL DESCRIPTION

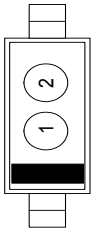
●Small package, SOD-323
Suitable for compact, low profile circuit designs
●Low Forward Voltage (@IF=500mA, Actual VF=400mV)
●Short reverse recovery time (Actual trr=10ns)

■PACKAGING INFORMATION



SOD-323

■MARKING RULE



①0 (Product Number)
②Assembly Lot Number

■ABSOLUTE MAXIMUM RATINGS

Ta = 25℃

PARAMETER	SYMBOL	RATINGS	UNIT
Repetitive Peak Reverse Voltage	V_{RM}	30	V
Reverse Voltage (DC)	V_R	20	V
Forward Current (Average)	$I_{F(AV)}$	0.5	A
Non Continuous Forward Surge Current*1	I_{FSM}	5	A
Junction Temperature	Tj	125	℃
Storage Temperature Range	Tstg	-55~+150	℃

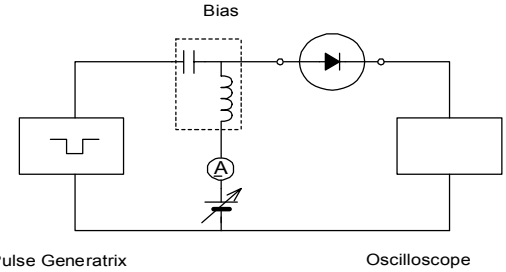
*1: Non continuous high amplitude 60Hz half-sine wave.

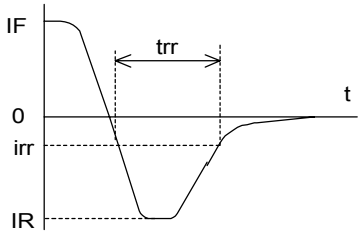
■ELECTRICAL CHARACTERISTICS

Ta=25℃

PARAMETER	SYMBOL	TEST CONDITIONS	LIMITS			UNITS
			MIN.	TYP.	MAX.	
Forward Voltage (DC)	V_F1	I_F=100mA	–	–	0.36	V
	V_F2	I_F=500mA	–	0.4	0.46	V
Reverse Current (DC)	I_R	V_R=20V	–	–	100	μA
Inter-Terminal Capacity	Ct	V_R=10V, f=1MHz	–	12	–	pF
Reverse Recovery Time *2	trr	I_F=I_R=10mA, irr=1mA	–	10	–	ns

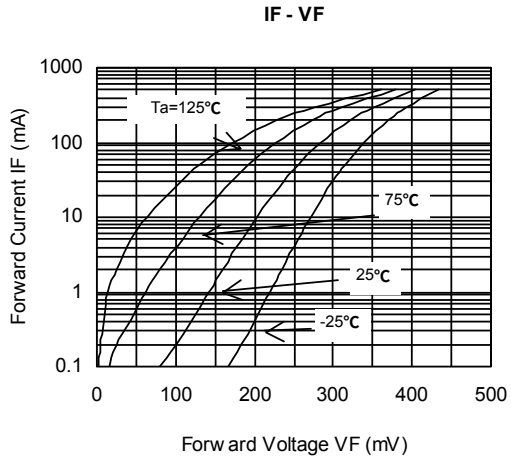
Note) 1. This product has a weakness for an electroshock such as electrostatic.
Please be careful of an electrification to human body and an electric leakage in the application.
2. *2 : trr measurement circuit



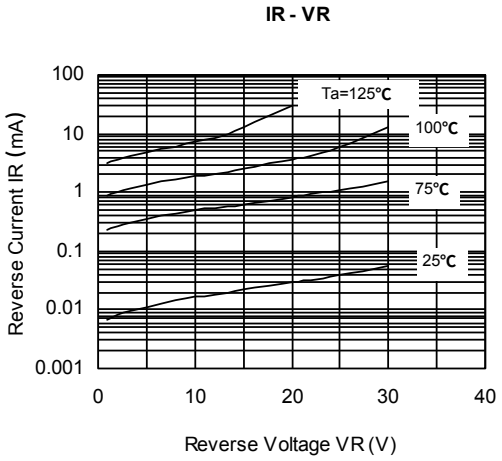


■TYPICAL PERFORMANCE CHARACTERISTICS

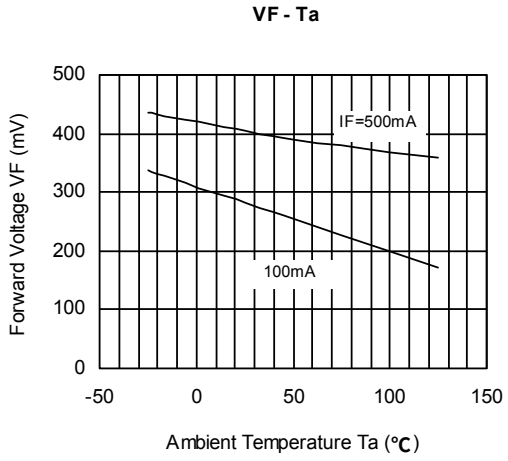
(1) Forward Voltage vs. Forward Current



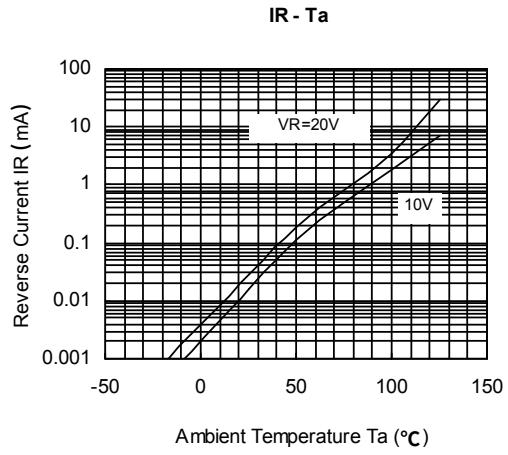
(2) Reverse Voltage vs. Reverse Current



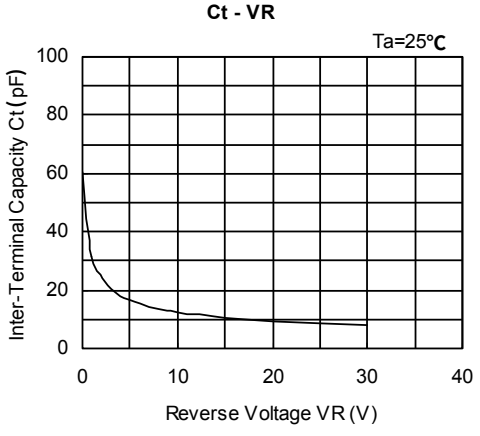
(3) Ambient Temperature vs. Forward Voltage



(4) Ambient Temperature vs. Reverse Current



(5) Reverse Voltage vs. Inter-Terminal Capacity



(6) Ambient Temperature vs. Average Forward Current