

# Low Power Rectification For Switching Power Supply

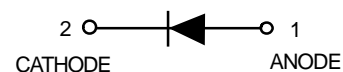
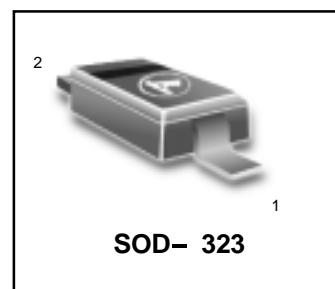
**LBR412T1G**

## FEATURE

- Small Surface Mounting Type.
- Low Forward Voltage :  $V_F \text{ max}=0.5\text{V}$
- High Reliability
- We declare that the material of product compliance with RoHS requirements.

## CONSTRUCTION

- Silicon epitaxial planar.



## ORDERING INFORMATION

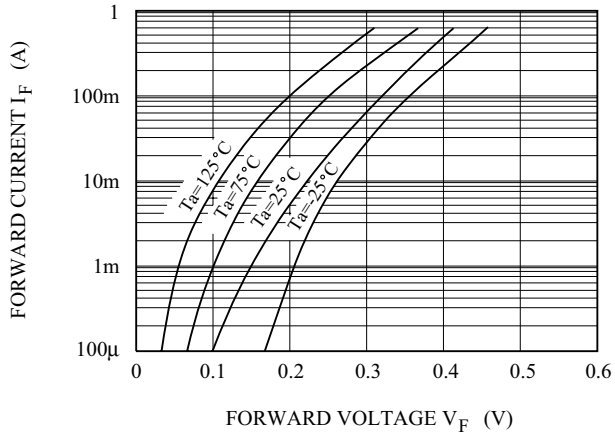
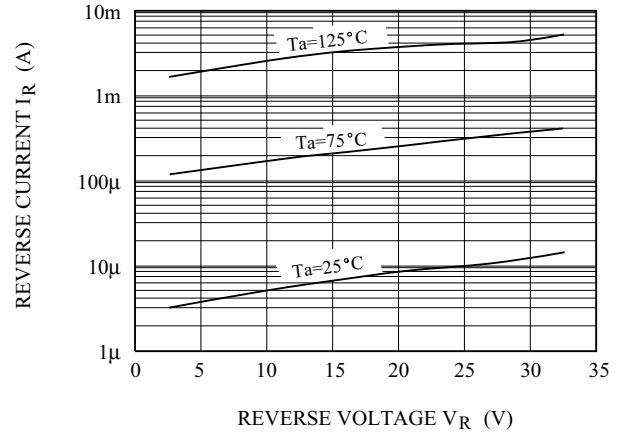
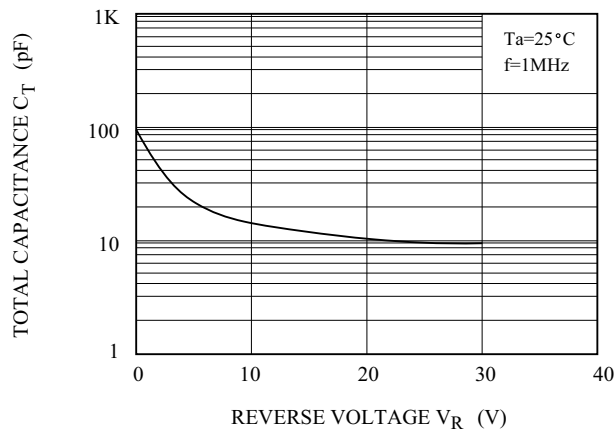
Device	Marking	Shipping
LBR412T1G	U3	3000/Tape&Reel
LBR412T3G	U3	10000/Tape&Reel

## MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Peak Reverse Voltage	$V_{RM}$	40	V
DC Reverse Voltage	$V_R$	20	V
Average Forward Current	$I_O$	0.5	A
Peak Forward Surge Current	$I_{FSM}$	3	A
Junction Temperature	$T_j$	125	°C
Storage Temperature Range	$T_{stg}$	-40 ~ +125	°C

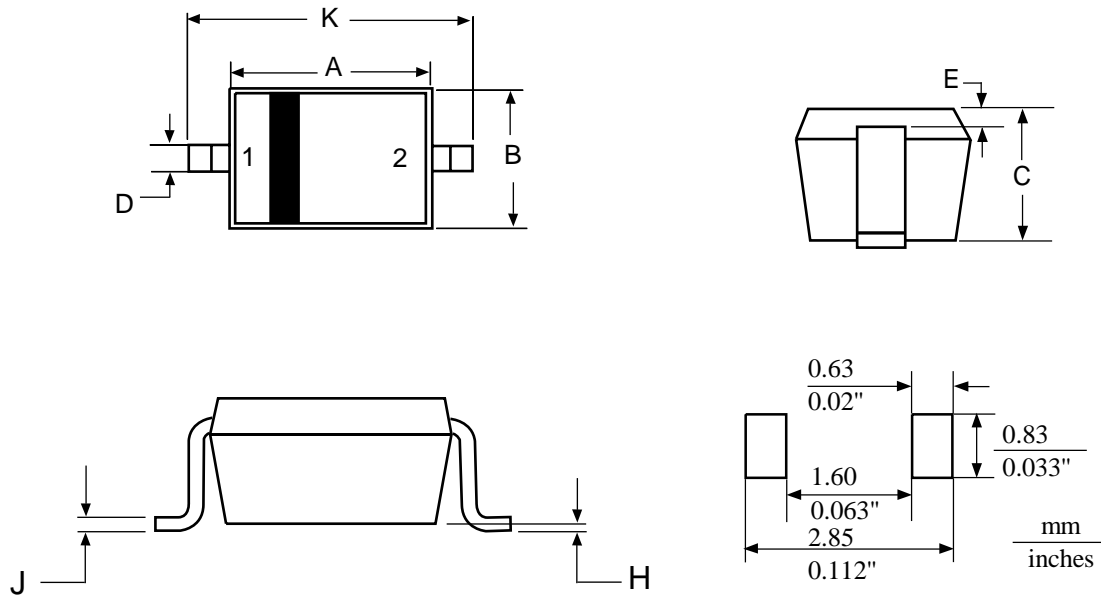
## ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	$V_F(1)$	$I_F=10\text{mA}$	-	-	0.3	V
	$V_F(2)$	$I_F=500\text{mA}$	-	-	0.5	V
Reverse Current	$I_R$	$V_R=10\text{V}$	-	-	30	$\mu\text{A}$
Total Capacitance	$C_T$	$V_R=10\text{V}, f=1\text{MHz}$	-	20	-	pF

**LBR412T1G**
 $I_F - V_F$ 

 $I_R - V_R$ 

 $C_T - V_R$ 


**LBR412T1G**

**SOD-323**



**NOTES:**

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.80	0.063	0.071
B	1.15	1.35	0.045	0.053
C	0.80	1.00	0.031	0.039
D	0.25	0.40	0.010	0.016
E	0.15 REF		0.006 REF	
H	0.00	0.10	0.000	0.004
J	0.089	0.177	0.0035	0.0070
K	2.30	2.70	0.091	0.106

PIN:1:CATHODE  
2:ANODE