

# Schottky barrier diode

## LRB421LT1G

### ●Applications

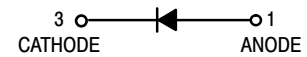
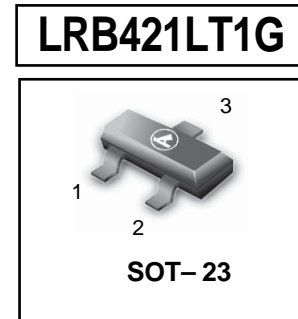
Low power rectification

### ●Features

- 1) Small mold type. (SOT-23)
- 2) Low  $I_R$
- 3) High reliability.

### ●Construction

Silicon epitaxial planar



- We declare that the material of product compliance with RoHS requirements.

### ●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	$V_{RM}$	40	V
Reverse voltage (DC)	$V_R$	40	V
Average rectified forward current (*1)	$I_o$	100	mA
Forward current surge peak (60Hz·1cyc) (*1)	$I_{FSM}$	1	A
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-40 to +125	°C

(\*1) Rating of per diode

### ●Electrical characteristics (Ta = 25°C)

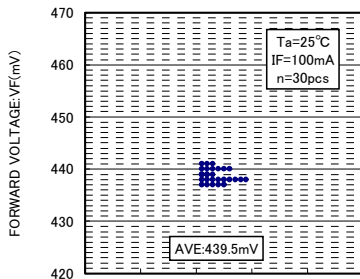
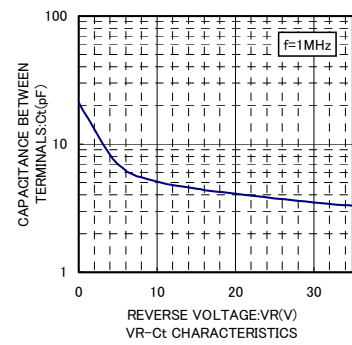
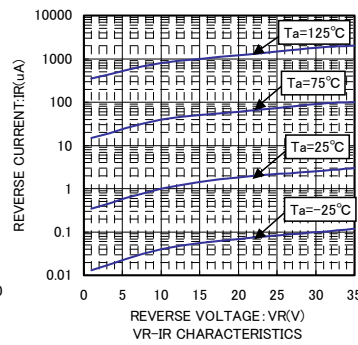
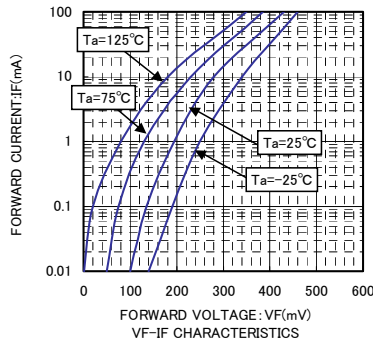
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_{F1}$	-	-	0.55	V	$I_F=100mA$
	$V_{F2}$	-	-	0.34	V	$I_F=10mA$
Reverse current	$I_R$	-	-	30	$\mu A$	$V_R=10V$
Capacitance between terminal	$C_t$	-	6	-	pF	$V_R=10V, f=1MHz$

### ●Device marking and ordering information

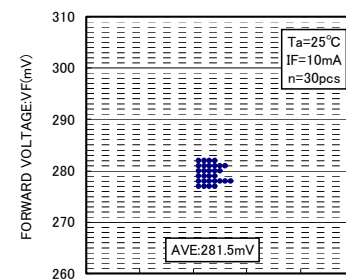
Device	Marking	Shipping
LRB421LT1G	D3C	3000/Tape&Reel
LRB421LT3G	D3C	10000/Tape&Reel

# LRB421LT1G

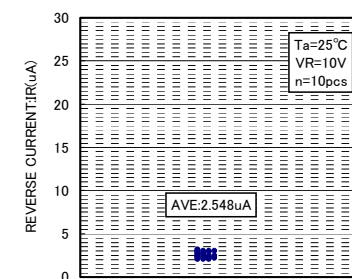
## Electrical characteristic curves (Ta = 25°C)



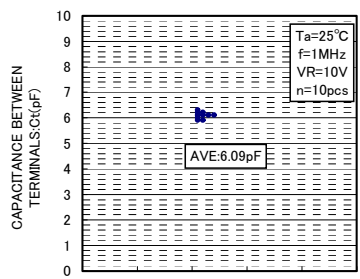
VF DISPERSION MAP



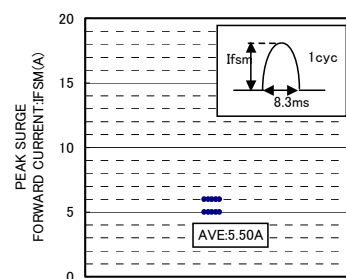
VF DISPERSION MAP



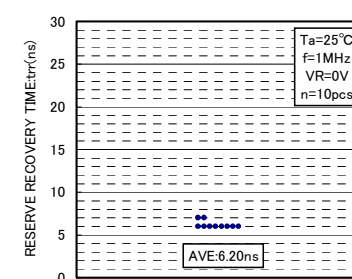
IR DISPERSION MAP



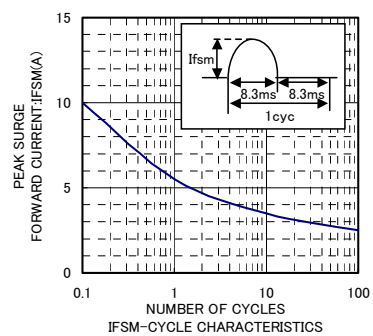
Ct DISPERSION MAP



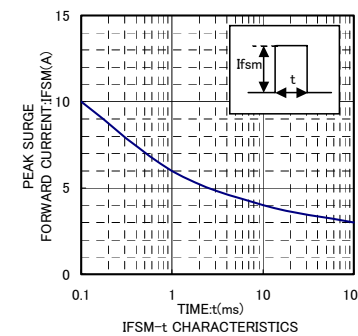
IFSM DISERSION MAP



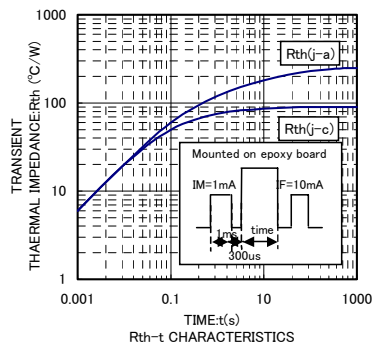
trr DISPERSION MAP



IFSM-CYCLE CHARACTERISTICS



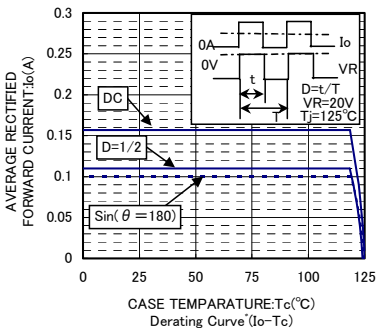
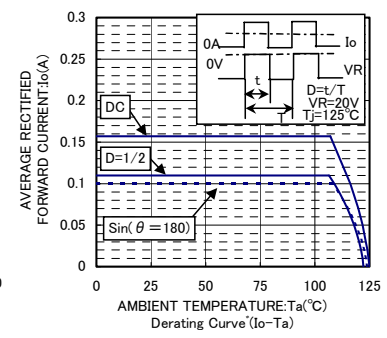
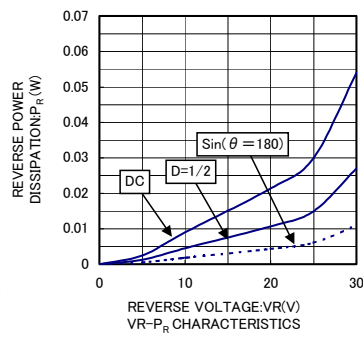
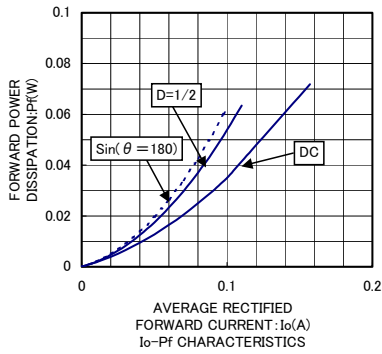
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS

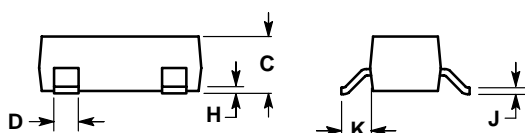
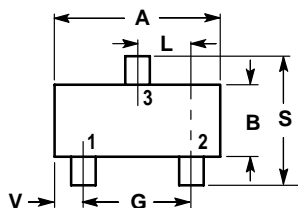
# LRB421LT1G

## Electrical characteristic curves (Ta = 25°C)



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## SOT-23



NOTES:

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

DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

- PIN 1. ANODE  
 2. NO CONNECTION  
 3. CATHODE

