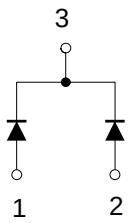
Schottky barrier diode

LRB425LT1G

SOT-23



●Applications

Low power rectification

●Features

1) Small surface mounting type. (SMD3)
2) Low V_F. (V_F=0.45V Typ. at 100mA)
3) High reliability.
4) We declare that material of product compliance with ROHS requirements.

●Construction

Silicon epitaxial planar

● DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LRB425LT1G	D3L	3000/Tape&Reel
LRB425LT3G	D3L	10000/Tape&Reel

●Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak reverse voltage	V_{RM}	40	V
DC reverse voltage	V_R	40	V
Mean rectifying current	I_O	0.1	A
Peak forward surge curren*	I_{FSM}	1	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–40~+125	°C

* 60Hz for 1

●Electrical characteristics (Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}	–	–	0.55	V	I_F=100mA
Forward voltage	V_{F2}	–	–	0.34	V	I_F=10mA
Reverse current	I_R	–	–	30	μA	V_R=10V
Capacitance between terminals	C_T	–	6.0	–	pF	V_R=10V, f=1MHz

Note) ESD sensitive product handling required.

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Electrical characteristic curves (Ta = 25°C)

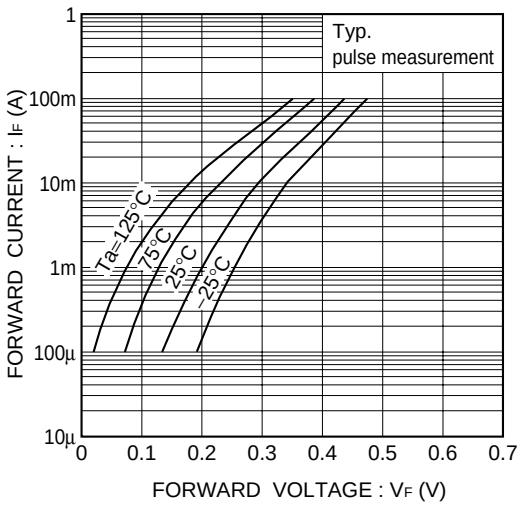

Fig. 1 Forward characteristics

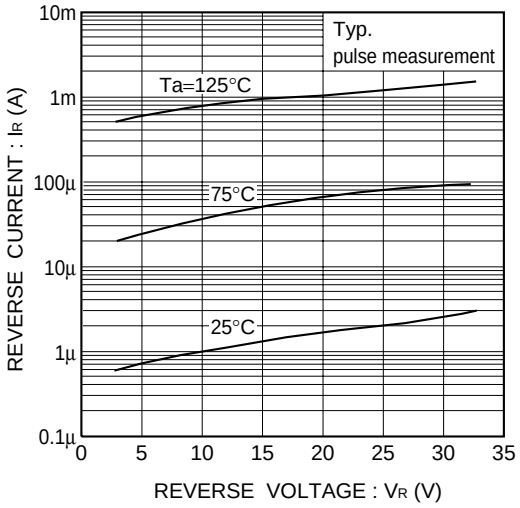

Fig. 2 Reverse characteristics

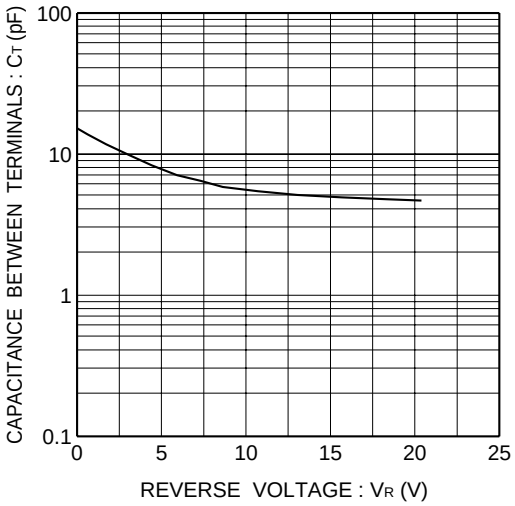

Fig. 3 Capacitance between terminals characteristics

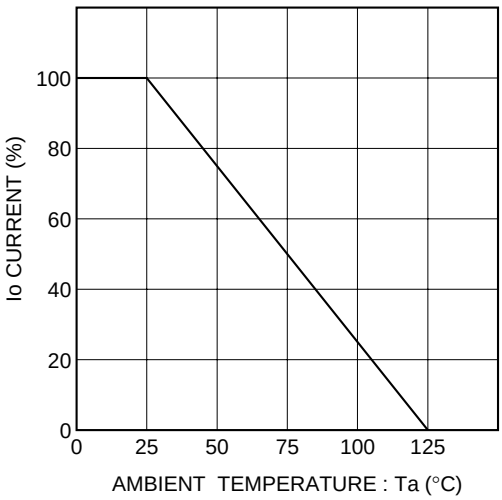

Fig. 4 Derating curve (mounting on glass epoxy PCBs)

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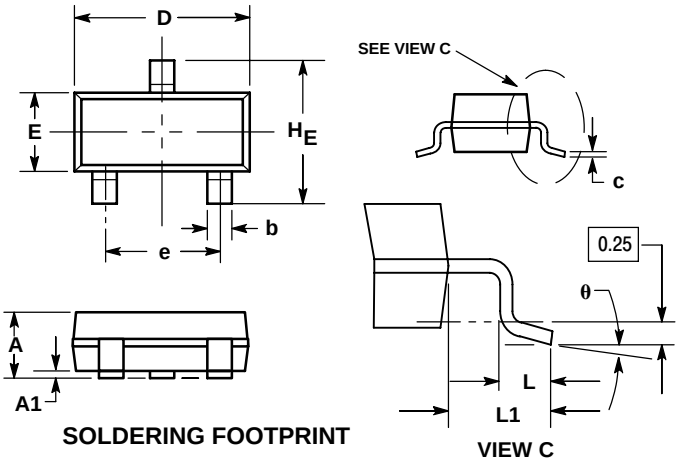

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1.00	1.11	0.035	0.040	0.044
A1	0.01	0.06	0.10	0.001	0.002	0.004
b	0.37	0.44	0.50	0.015	0.018	0.020
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.90	3.04	0.110	0.114	0.120
E	1.20	1.30	1.40	0.047	0.051	0.055
e	1.78	1.90	2.04	0.070	0.075	0.081
L	0.10	0.20	0.30	0.004	0.008	0.012
L1	0.35	0.54	0.69	0.014	0.021	0.029
H_E	2.10	2.40	2.64	0.083	0.094	0.104

SOLDERING FOOTPRINT