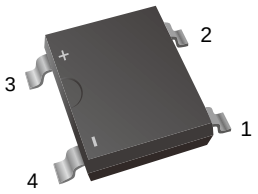
LTRA1S-20 THRU LTRA10S-20

2A Glass Passivated Single-Phase Bridge Rectifier

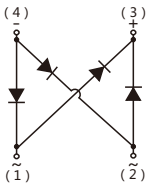
Features

- Glass passivated chip
- Low Reverse Leakage Current
- High surge current capability
- Lead free in comply with EU RoHS 2011/65/EU directives



Mechanical Data

- Case: ABS/LBF
- Marking / Polarity: Marked on Body
- Approx. Weight: 0.083g



Ordering Information

Part Number	Shipping	Reel
LTRA1S-20 THRU LTRA10S-20-TR5	5000PCS Tape&Reel	13 inchs

Maximum Ratings and Thermal Characteristics @ Ta = 25℃unless otherwise noted

Symbol	Characteristic	LTRA 1S-20	LTRA 2S-20	LTRA 4S-20	LTRA 6S-20	LTRA 8S-20	LTRA 10S-20	Unit
V_{RRM}	Maximum Recurrent Peak Reverse Voltage	100	200	400	600	800	1000	V
$I_{F(AV)}$	Average Forward Output Rectified Current	2						A
V_F	Maximum Forward Voltage at 2.0A	1.3						V
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine- wave superimposed on rated load	50						A
I_R	Maximum DC reverse current at rated Ta = 25℃ DC blocking voltage per leg Ta = 125℃	5 500						μA
T_{RR}	Maximum reverse recovery time (NOTE 1)	150		250		500		nS
C_J	Typical Junction Capacitance	18						PF
$R_{\theta JC}$	Maximum thermal resistance per leg	10						℃/W
Tj, T_{STG}	Operating Junction and storage temperature range	-55～150						℃

Note:
(1) Junction to case with heatsink
(2) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw .

Characteristics Curves

Fig. 1 Forward Current Derating Curve

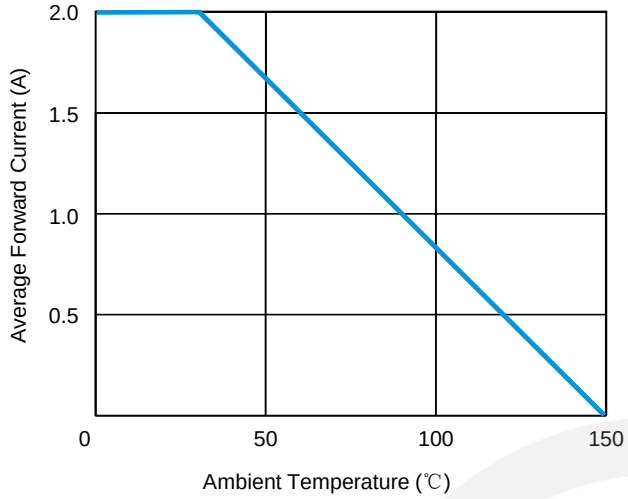


Fig. 2 Maximum Non-Repetitive Surge Current

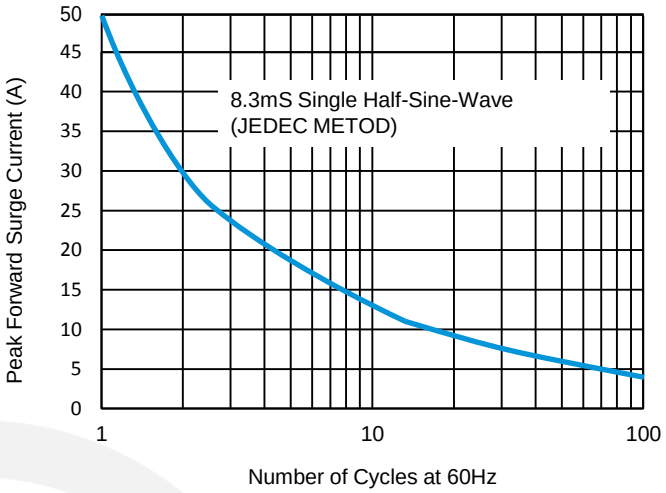


Fig. 3 Typical Reverse Characteristics

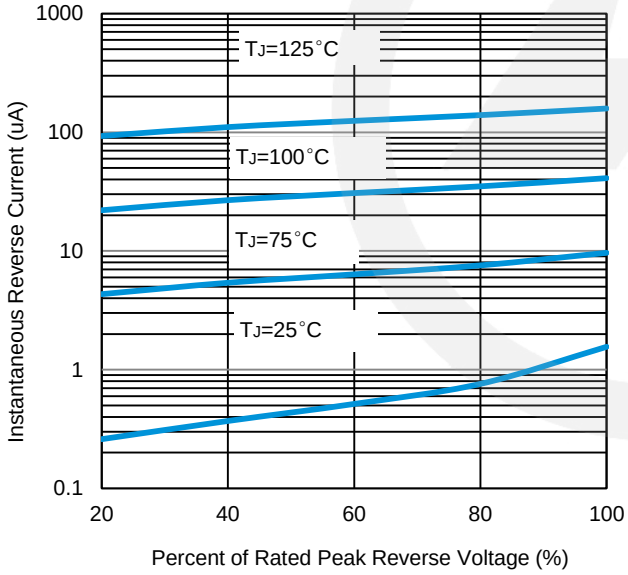
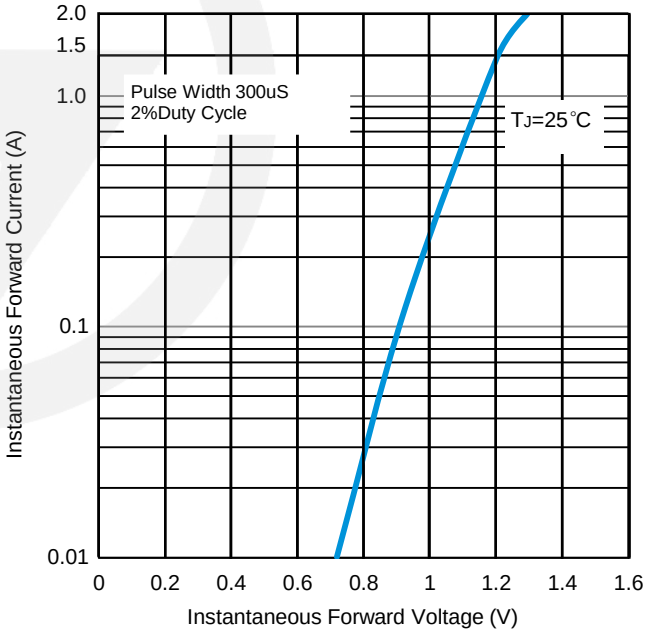
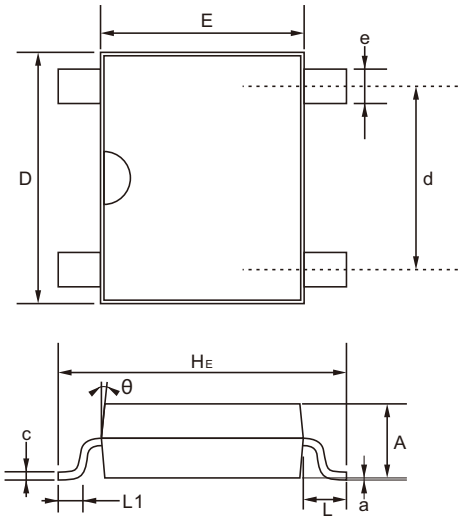


Fig. 4 Typical Forward Characteristics



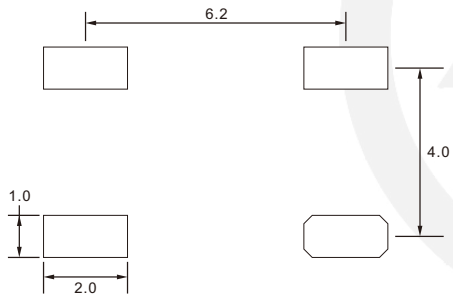
ABS/LBF Package Outline



Unit: mm

SYMBOL	DIMENSIONS	
	MIN.	MAX.
A	1.300	1.500
C	0.150	0.220
D	4.900	5.200
E	4.200	4.500
HE	6.000	6.400
d	3.800	4.200
e	0.500	0.700
L	0.950 TYP.	
L1	0.600 TYP.	
a	0.200 TYP.	
θ	7°	

ABS/LBF Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm
3.The pad layout is for reference purpose only.

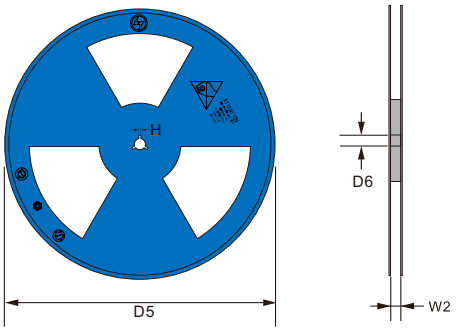
Marking

Type number	Marking code
LTRA1S-20	RABS201
LTRA2S-20	RABS202
LTRA4S-20	RABS204
LTRA6S-20	RABS206
LTRA8S-20	RABS208
LTRA10S-20	RABS210

Reel Dimensions

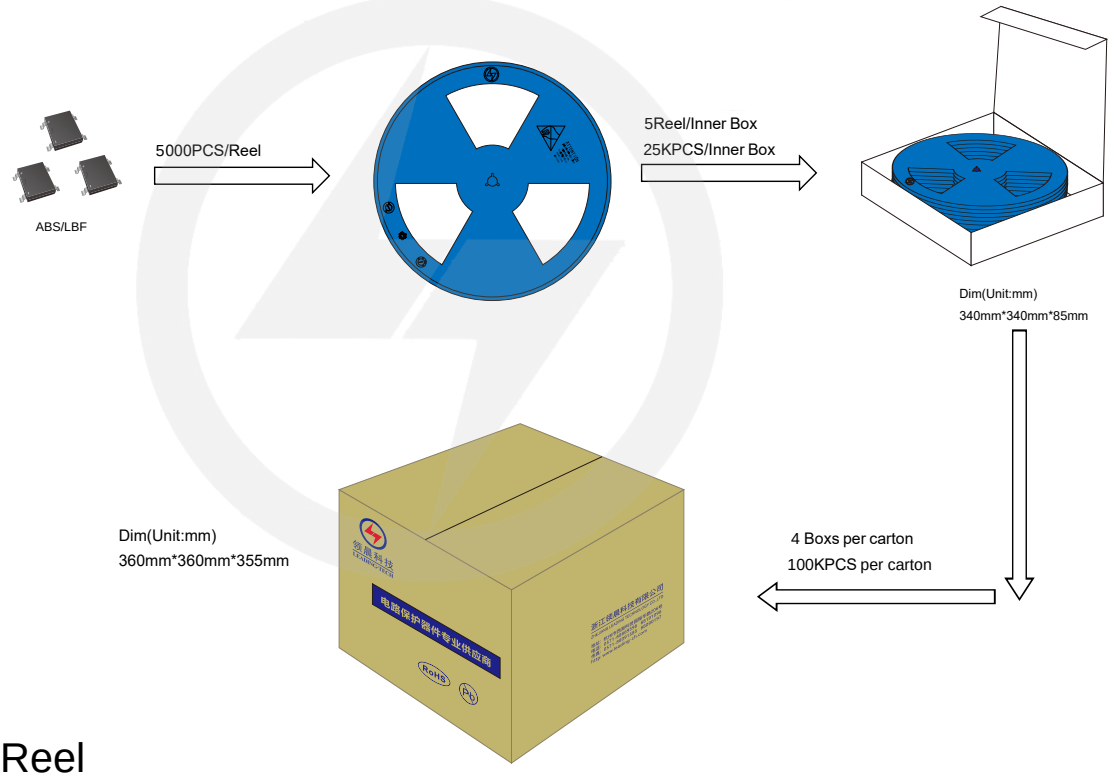
Unit：mm

13” Reel



D5	Φ330.0±2.0
D6	Φ13.5±0.5
H	2.5±1.0
W2	12±2.0
Quantity: 5000PCS	

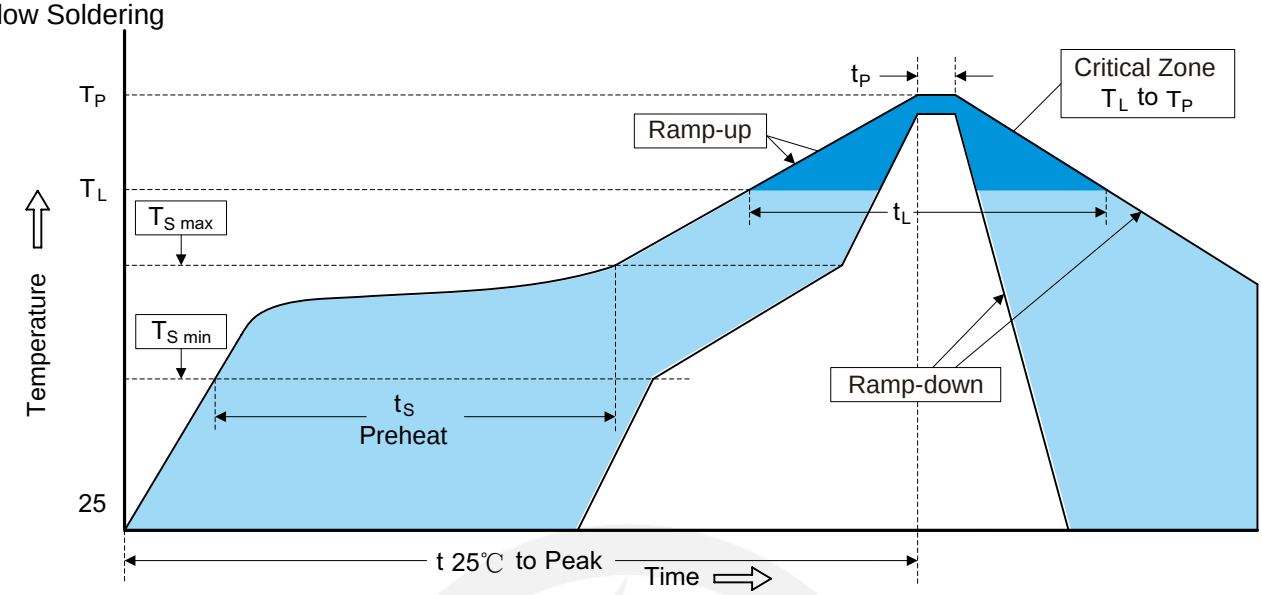
Packaging



13 inchs Reel

Recommended Soldering Conditions

Reflow Soldering



Recommended Conditions

Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to T_P)	3℃/second max.
Preheat -Temperature Min ($T_{S\ min}$) -Temperature Max ($T_{S\ max}$) -Time (min to max) (t_S)	 150℃ 200℃ 60-180 seconds
$T_{S\ max}$ to T_L -Ramp-up Rate	 3℃/second max.
Time maintained above: -Temperature (T_L) -Time (t_L)	 217℃ 60-150 seconds
Peak Temperature (T_P)	260℃
Time within 5℃ of actual Peak Temperature (t_P)	20-40 seconds
Ramp-down Rate	6℃/second max.
Time 25℃ to Peak Temperature	8 minutes max.

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Version Update Information

Series NO.	Enactment/Revision Date	Effective Date	Version	Revision content	Revision Reason	Revision Person	Note
01	2025.10.17	2025.10.17	3.0	New File	/	Ding	