

LV10T100D

Rev.F Mar.-2016

/ Descriptions

TO-252

Schottky Diode in a TO-252 Plastic Package.

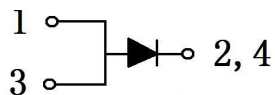
/ Features

High Forward Surge Capability, Ultra Low Forward Voltage Drop, Excellent High Temperature Stability.

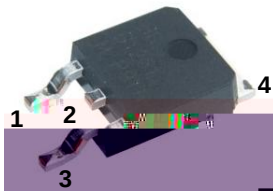
/ Applications

For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

/ Equivalent Circuit



/ Pinning



PIN1 Anode

PIN 2,4 Cathode

PIN 3 Anode

/ h_{FE} Classifications & Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RM} V_{RSM} V_{DC}	100	V
RMS Reverse Voltage	V_{RMS}	70	V
Average forward rectified current	$I_{F(AV)}$	1×10	A
Non Repetitive Peak Surge Current	I_{FSM}	200	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	2.0	/W
Junction and Storage Temperature Range	T_j T_{stg}	-55 +150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	$V_{(BR)R}$	$I_R=1mA(Ta=25)$	100			V
Forward Voltage	V_F	$I_F=2A(Ta=25)$		0.41	0.45	V
		$I_F=10A(Ta=25)$		0.58	0.65	V
		$I_F=2A(Ta=125)$		0.31	0.40	V
		$I_F=10A(Ta=125)$		0.55	0.65	V
Instantaneous Reverse Current	I_R Note 1	$V_R=100V(Ta=25)$			150	μA
		$V_R=100V(Ta=125)$			25	mA

/Notes

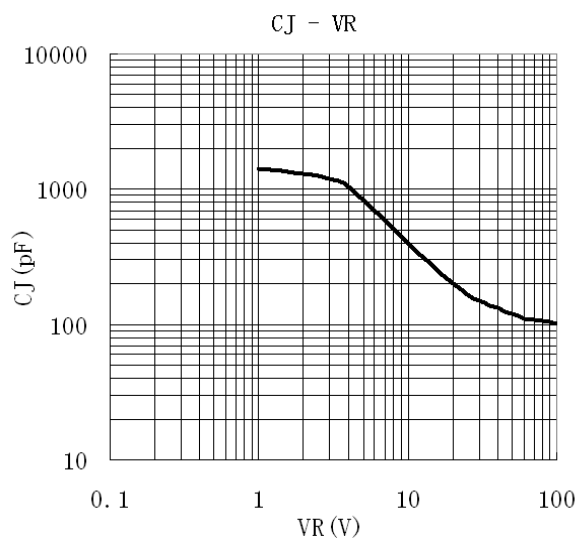
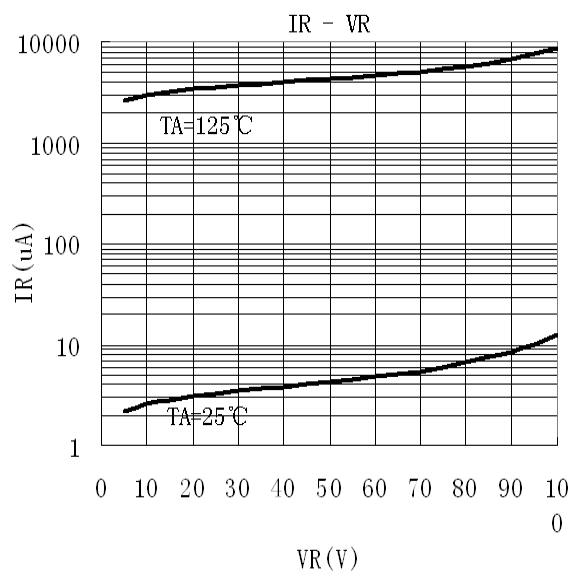
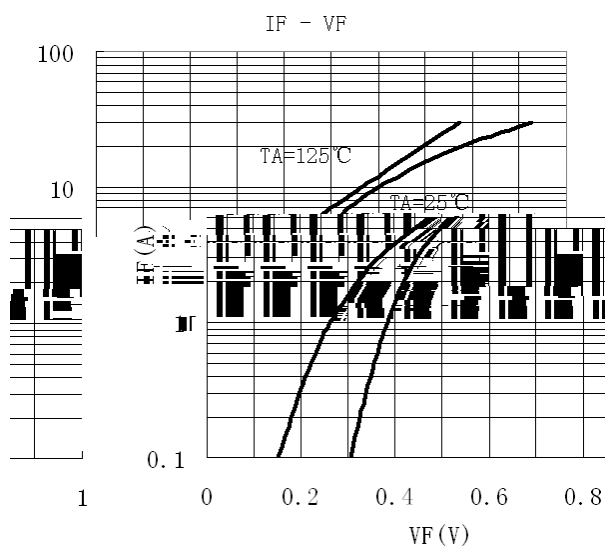
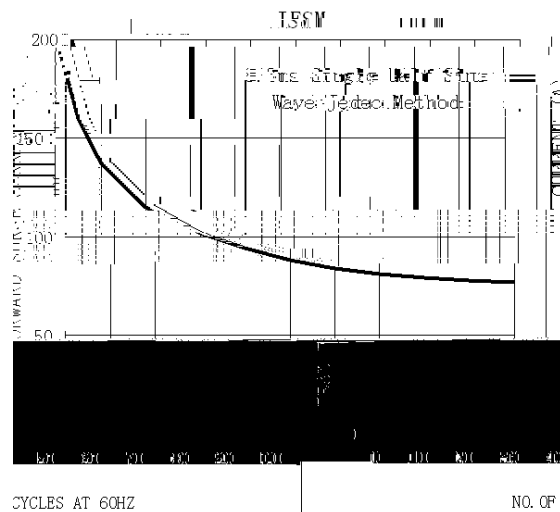
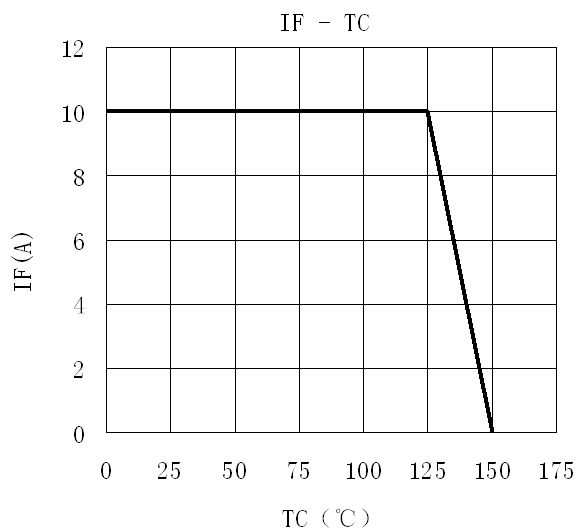
1.

Short duration pulse test used to minimize self-heating effect.

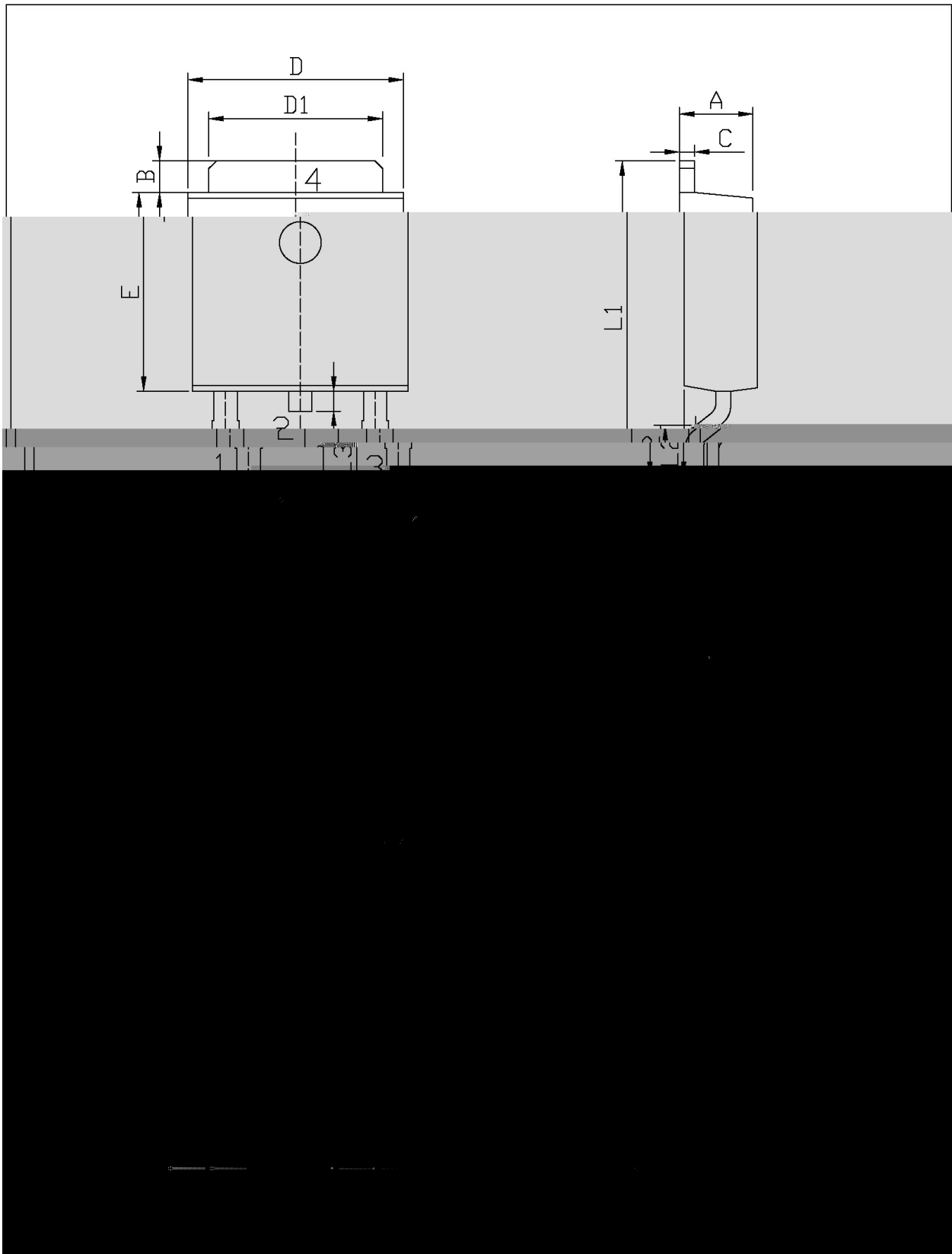
2.

Unless otherwise noted, values for the parameters of a single chip

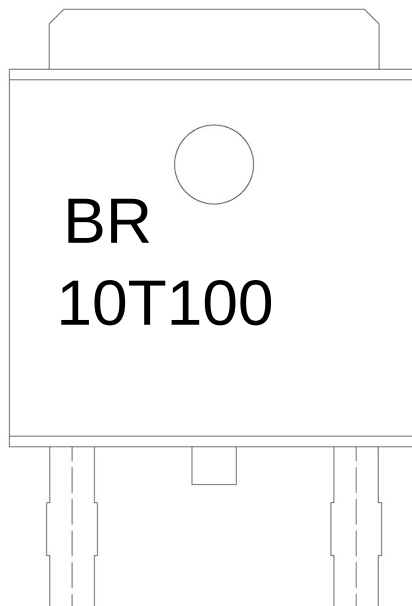
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



BR

10T100

Note:

BR:

Company Code

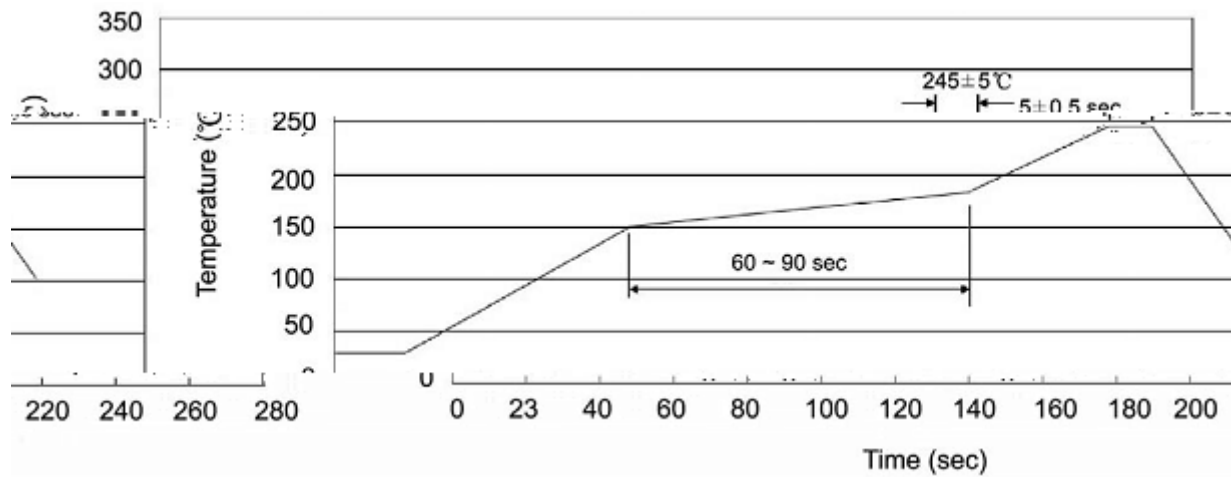
10T100

Product Type Code.

****:

Lot No. Code, code change with Lot No.

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-----------|---|--------------------------------------|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 245±5 | | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. | |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |