

LV30200PT

Rev.F Mar.-2016

/ Descriptions

Schottky Barrier Diode in a TO-3P Plastic Package.

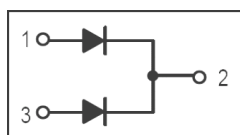
/ Features

Low forward voltage drop, low power losses, High efficiency operation.

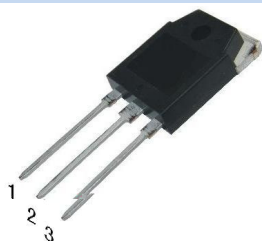
/ Applications

For use in high frequency inverters, switching power supplies, freewheeling diodes, OR-ing diode, dc-to-dc converters and reverse battery protection.

/ Equivalent Circuit



/ Pinning



PIN1 Anode PIN 2 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_{RWM} V_{DC}	200	V
RMS Reverse Voltage	V_{RMS}	140	V
Average forward current	$I_{F(AV)}$	2× 15	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	200	A
Thermal Resistance Junction to Ambient case	R_{Jc}	1.4	°C/W
Operating and Storage Temperature Range	T_j T_{stg}	-40 +150	°C

/ Electrical Characteristics(Ta=25)

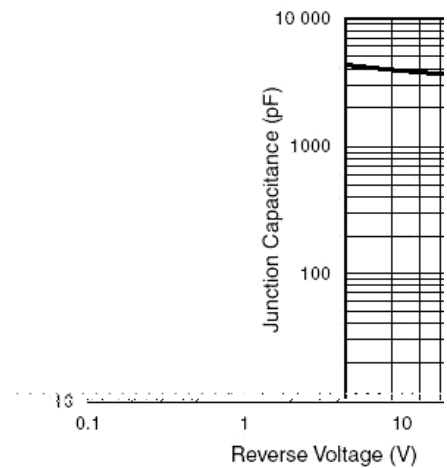
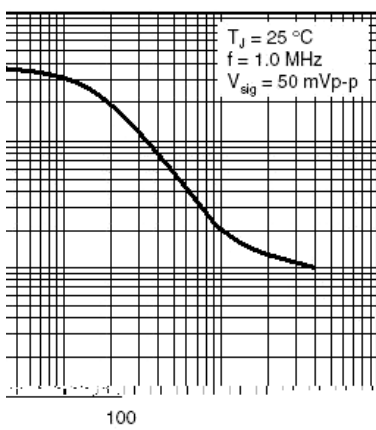
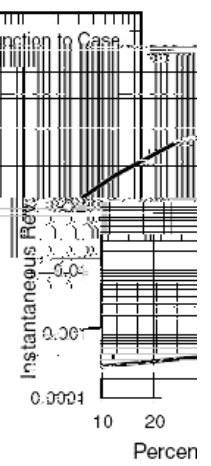
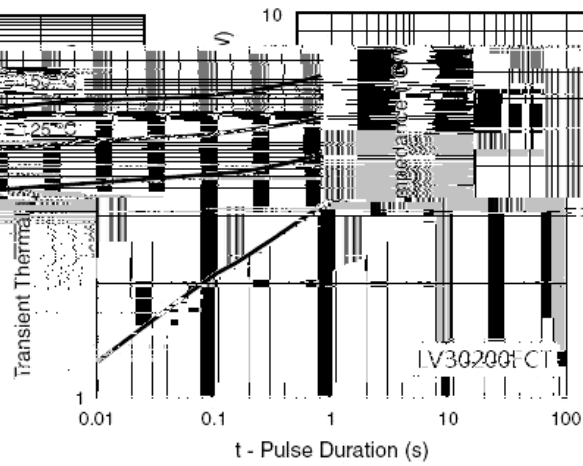
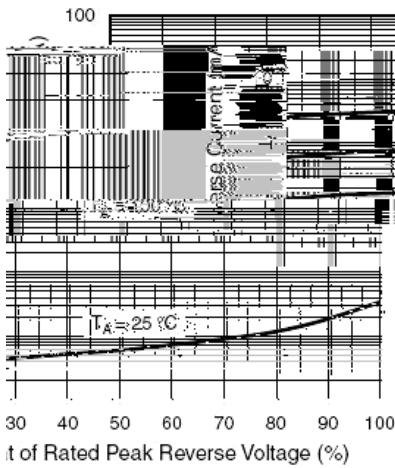
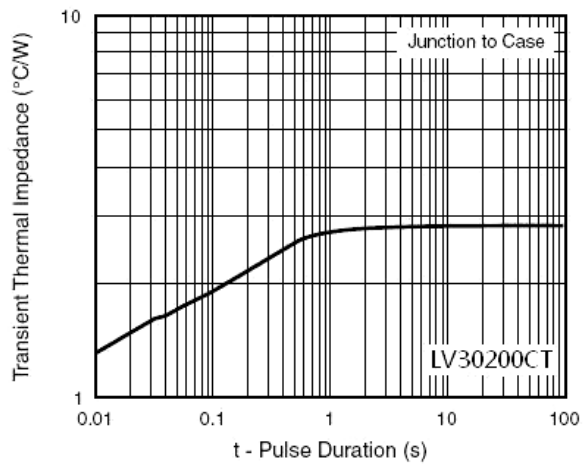
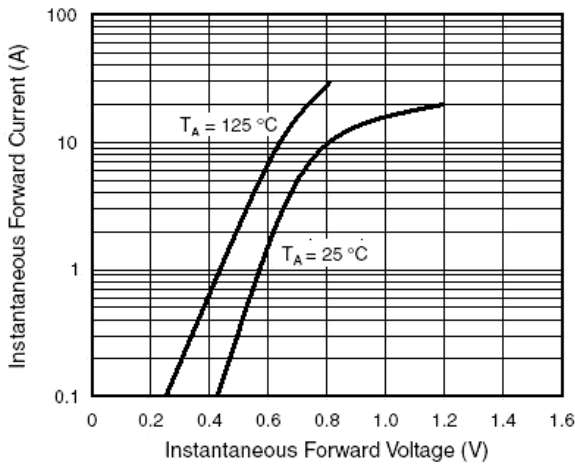
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	V_{BR}	$I_R=1mA(Ta=25^{\circ}C)$	200			V
Forward Voltage	V_F	$I_F=5A(Ta=25^{\circ}C)$		0.73	0.85	V
		$I_F=10A(Ta=25^{\circ}C)$		0.80	0.95	V
		$I_F=15A(Ta=25^{\circ}C)$		0.92	1.15	V
		$I_F=5A(Ta=125^{\circ}C)$		0.58		V
		$I_F=10A(Ta=125^{\circ}C)$		0.66		V
		$I_F=15A(Ta=125^{\circ}C)$		0.71	0.85	V
Instantaneous Reverse current (Note 1)	I_R Note 1	$V_R=200V(Ta=25^{\circ}C)$		4	20	μA
		$V_R=200V(Ta=125^{\circ}C)$		5	10	mA

Notes

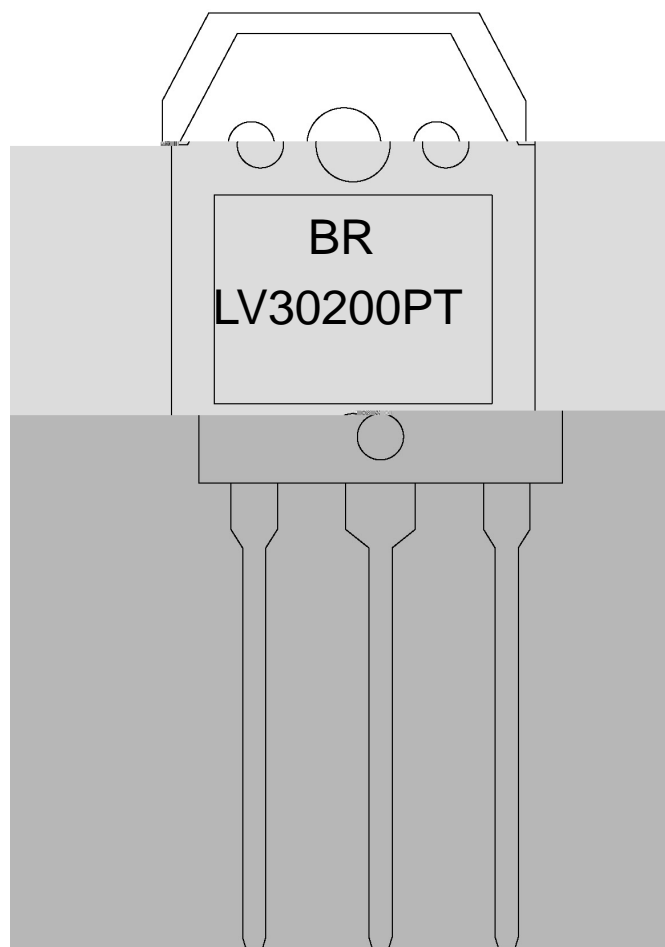
/Short duration pulse test used to minimize self-heating effect.

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

/ Electrical Characteristic Curve



/ Marking Instructions



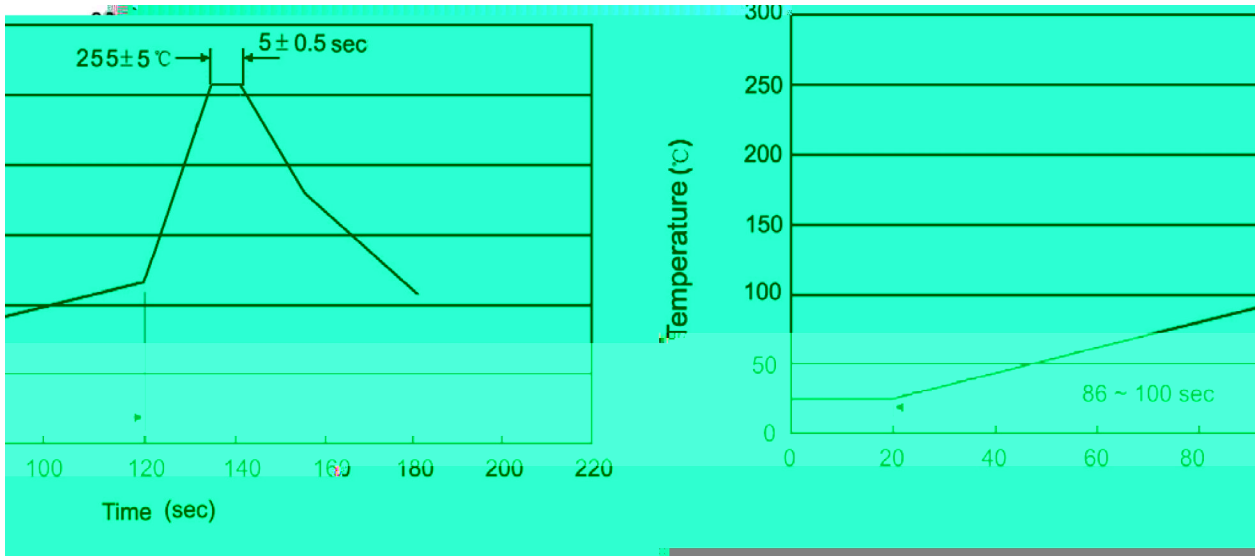
Note:

BR: Company Code.

LV30200PT: Product Type.

****: Lot No. Code, code change with Lot No.

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-----|-----|----|----------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255 | 5 | 5 | 0.5sec; | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

270 5 10 1 sec. Temp.:270±5°C Time:10±1 sec

/ Packaging SPEC.

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	只 套管	套管 盒	只 盒	盒 箱	只 箱	套管	盒	箱
								× ×

/ Notices