

LV30200PT

Rev.F Mar.-2016

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

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

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

/ 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	$R_{\theta Jc}$	1.4	/W
Operating and Storage Temperature Range	T_j T_{stg}	-40 +150	

/ Electrical Characteristics(Ta=25)

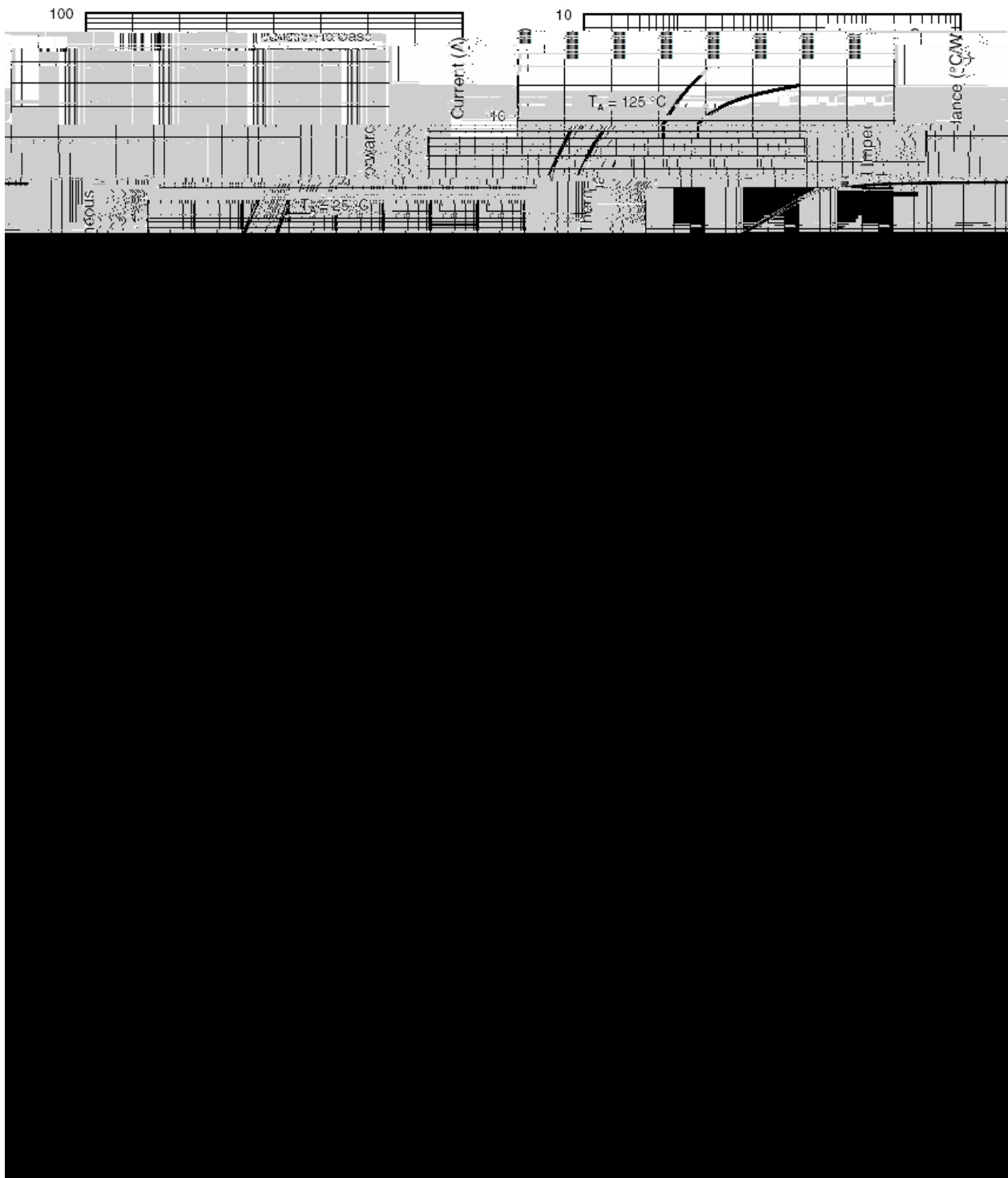
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	V_{BR}	$I_R=1mA(Ta=25)$	200			V
Forward Voltage	V_F	$I_F=5A(Ta=25)$		0.73	0.85	V
		$I_F=10A(Ta=25)$		0.80	0.95	V
		$I_F=15A(Ta=25)$		0.92	1.15	V
		$I_F=5A(Ta=125)$		0.58		V
		$I_F=10A(Ta=125)$		0.66		V
		$I_F=15A(Ta=125)$		0.71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

Notes

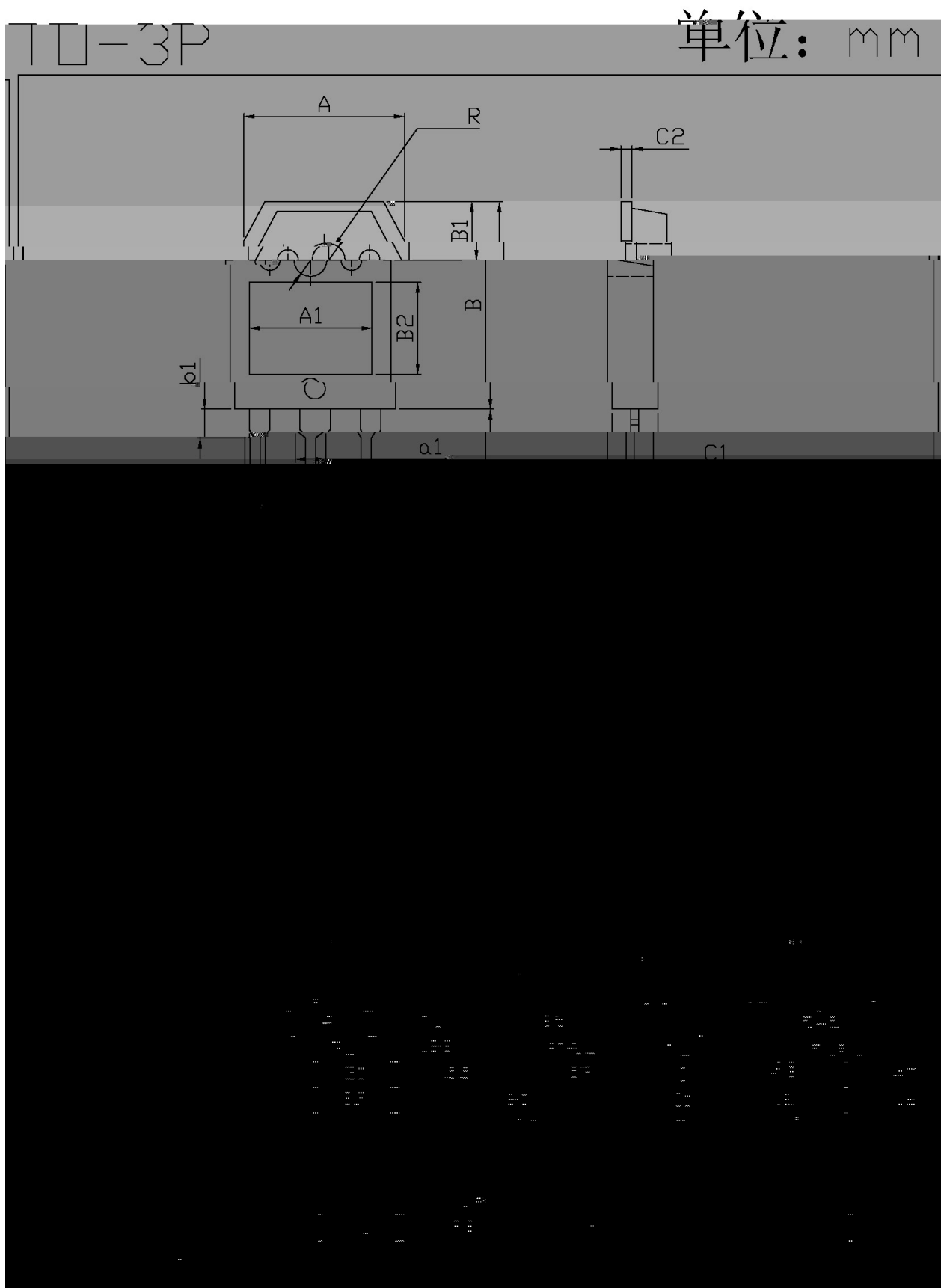
/Short duration pulse test used to minimize self-heating effect.

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

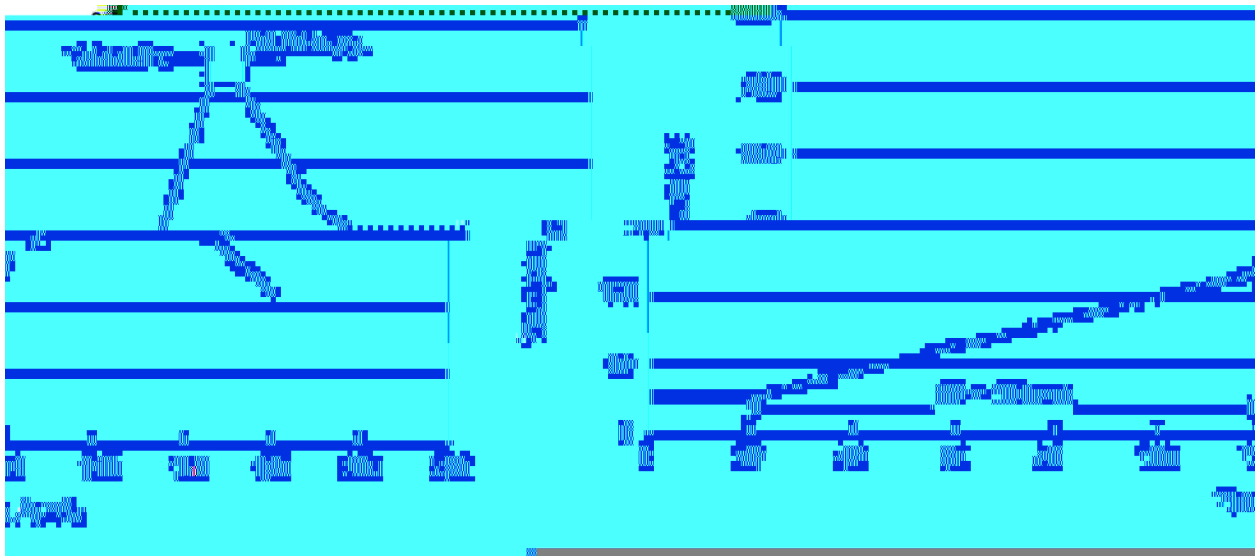
/ Electrical Characteristic Curve



/ Package Dimensions



() / 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