

/ Descriptions

WR0553

Schottky Barrier Diode in a TO-220 Plastic Package.

/ Features

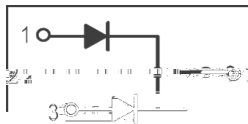
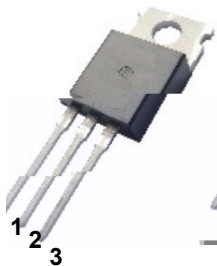
Low forward voltage drop, low power losses, High efficiency operation.

/ Applications

RU01q j

GF0GF

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($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RM} V_{RSM} V_{DC}	150	V
RMS Reverse Voltage	V_{RMS}	105	V
Average Rectified Forward Current	$I_{F(AV)}$	2×10	A
Non Repetitive Peak Surge Current	I_{FSM}	120	A
Thermal Resistance Junction to Case	$R_{\theta JC}$	2.8	/W
Junction and Storage Temperature Range	T_j T_{stg}	-55 +150	

/ Electrical Characteristics($T_a=25^\circ\text{C}$)

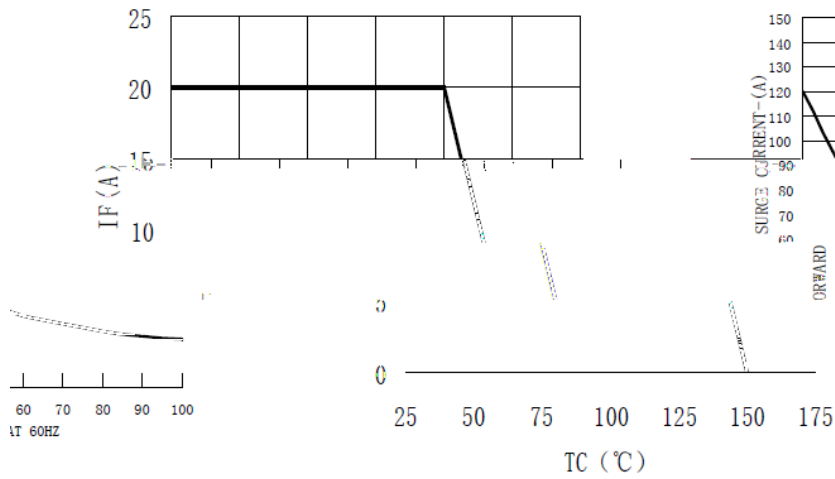
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Reverse Voltage	V_{BR}	$I_R=1\text{mA}(T_a=25^\circ\text{C})$	150			V
Forward Voltage	V_F	$I_F=5\text{A}(T_a=25^\circ\text{C})$		0.74		V
		$I_F=10\text{A}(T_a=25^\circ\text{C})$		0.84	0.95	V
		$I_F=5\text{A}(T_a=125^\circ\text{C})$		0.59		V
		$I_F=10\text{A}(T_a=125^\circ\text{C})$		0.69	0.75	V
Instantaneous Reverse Current	I_R Note 1	$V_R=150\text{V}(T_a=25^\circ\text{C})$			50	μA
		$V_R=150\text{V}(T_a=125^\circ\text{C})$		3	10	mA

/Notes

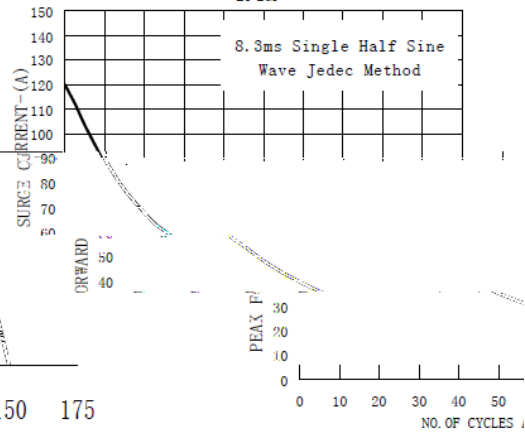
1. /Short duration pulse test used to minimize self-heating effect.
2. / Unless otherwise noted, values for the parameters of a single chip

/ Electrical Characteristic Curve

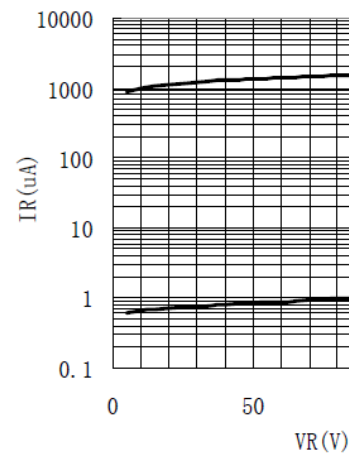
IF - TC



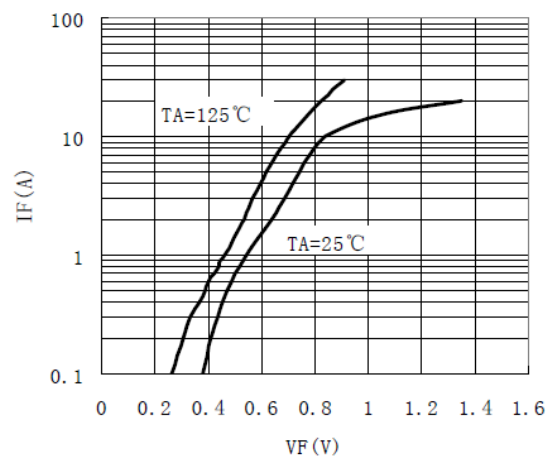
IFSM



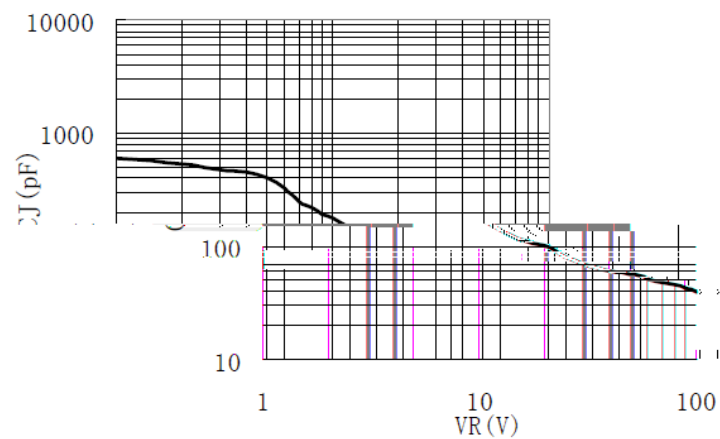
IR - VR



IF - VF



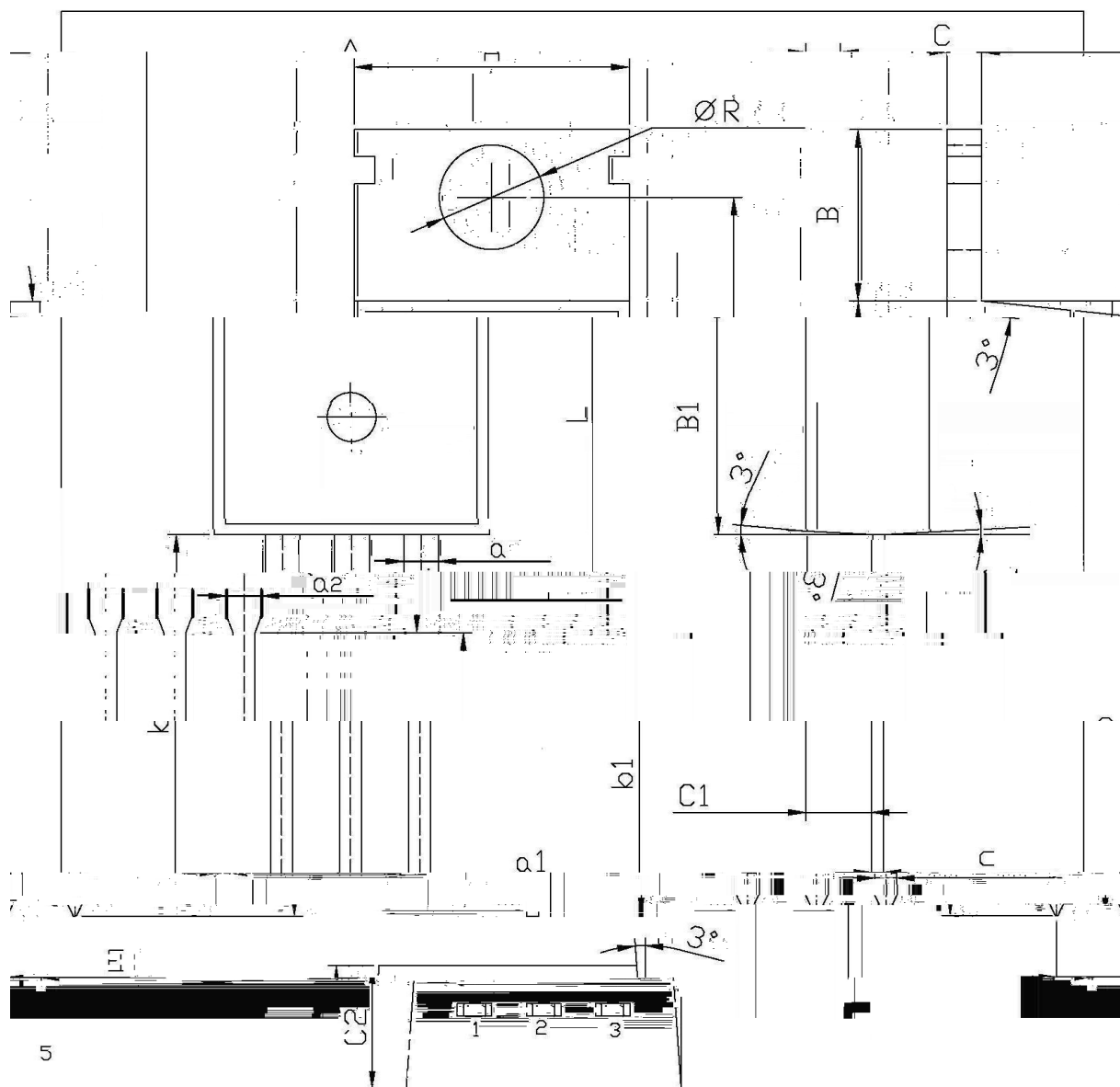
CJ - VR



/ Package Dimensions

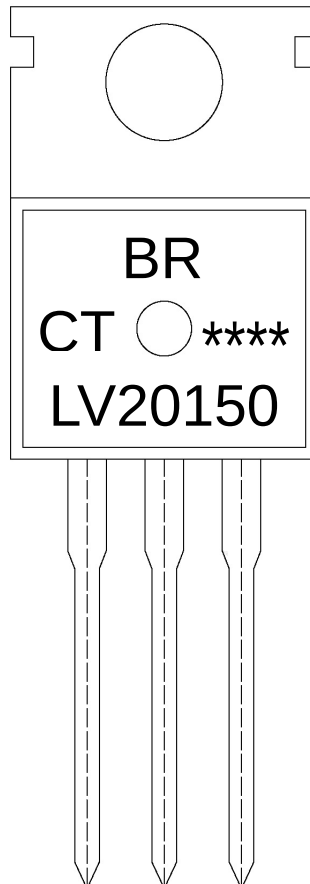
TQ-220

单位: mm



Symbol	Min	Max	Symbol	Min	Max
R	3.56	3.64	B	6.3	6.7
L	15.7	16.1	B1	9.0	9.4
b	12.6	13.6	C1	2.2	2.6
a	1.22	1.32	c	0.4	0.4
a1	2.34	2.74	c1	1.43	1.43
a2	1.25	1.45			

/ Marking Instructions



BR

0Y53483

FW-

Note:

BR: Company Code

LV20150 Product Type.

CT: Internal Structure

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

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



Note:

- 1 25 150% 60 90sec;
- 2 255^{±5}% 5^{±0.5}sec;
- 3 2 10%/sec.

- 1.Preheating:25~150%, Time:60~90sec.
- 2.Peak Temp.:255^{±5}%, Duration:5^{±0.5}sec.
3. Cooling Speed: 2~10%/sec.

/ Resistance to Soldering Heat Test Conditions

270^{±5}%10^{±1} sec.

Temp.:270±5

Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm ³)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices