

/ Descriptions

WR0553I

Schottky Barrier Diode in a TO-220F Plastic Package.

/ Features

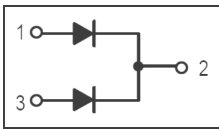
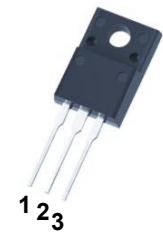
Low forward voltage drop, low power losses, High efficiency operation.

/ Applications

RU0lq 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(Ta=25)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RM} V_{RSM} V_{DC}	150	V
RMS Voltage	V_{RMS}	105	V
Average Rectified Output Current	$I_{F(AV)}$	2×20	A
Non Repetitive Peak Surge Current	I_{FSM}	300	A
Thermal Resistance Junction to Case	$R_{\theta JC}$	4.0	°C/W
Junction and Storage Temperature Range	T_j T_{stg}	-40 +150	°C

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	V_{BR}	$I_R=1mA(Ta=25)$	150			V
Forward Voltage	V_F	$I_F=5A(Ta=25)$		0.68		V
		$I_F=10A(Ta=25)$		0.76		V
		$I_F=20A(Ta=25)$		0.89	1.05	V
		$I_F=5A(Ta=125)$		0.56		V
		$I_F=10A(Ta=125)$		0.63		V
		$I_F=20A(Ta=125)$		0.73	0.85	V
Instantaneous Reverse Current	I_R Note 1	$V_R=150V(Ta=25)$		3.0	30	μA
		$V_R=150V(Ta=125)$		5.0	15	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**

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

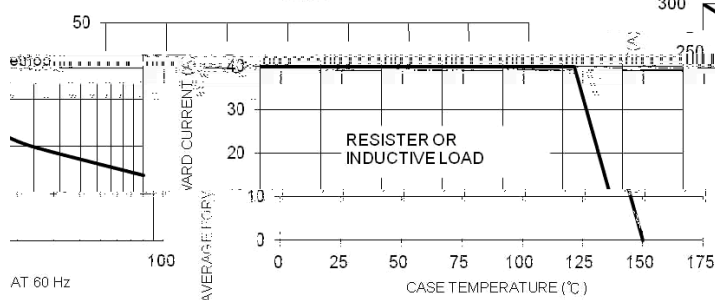


FIG.2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

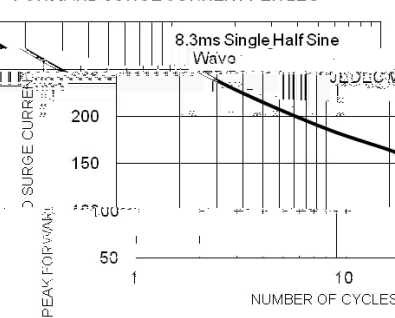


FIG.3 TYPICAL FORWARD CHARACTERISTICS PER LEG

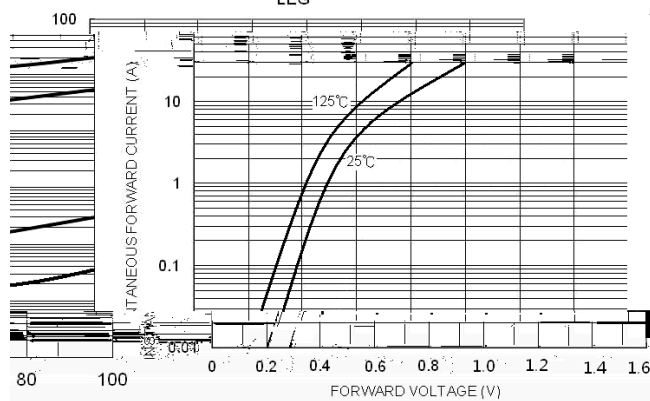
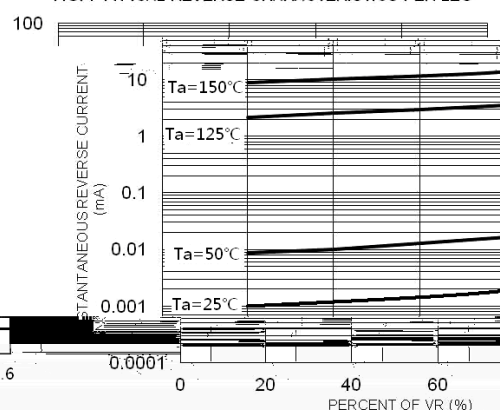
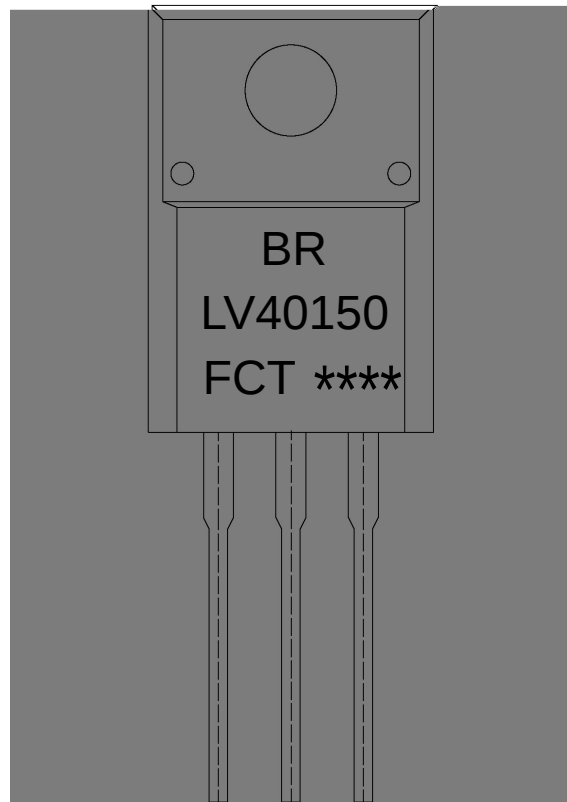


FIG.4 TYPICAL REVERSE CHARACTERISTICS PER LEG



/ Marking Instructions



EU

0Y73483

I=

FW=

Note:

BR: Company Code

LV40150 Product Type

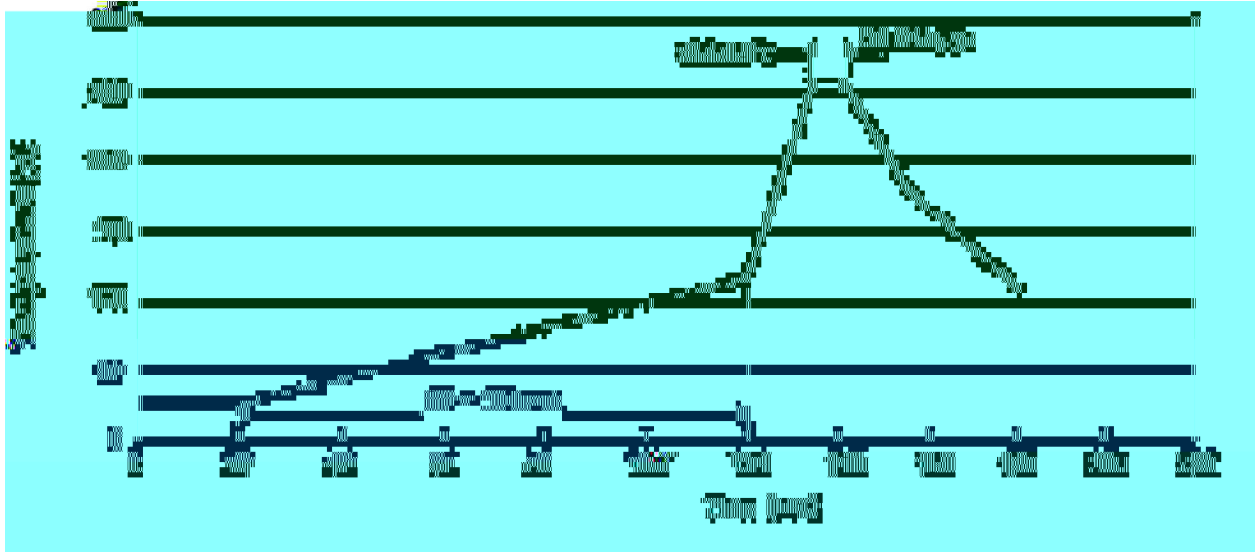
F: Package Code

CT: Internal Structure

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



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



Note:

- 1 25 150^{±3%} 60 90sec;
- 2 255^{±2.5%} 5^{±0.5sec};
- 3 2 10^{±3%}/sec.

- 1.Preheating:25~150^{±3%}, Time:60~90sec.
- 2.Peak Temp.:255^{±2.5%}, Duration:5^{±0.5sec}.
3. Cooling Speed: 2~10^{±3%}/sec.

/ Resistance to Soldering Heat Test Conditions

 270^{±2.5%} 10^{±1} sec. Temp.:270^{±5}°C 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