

/ Descriptions

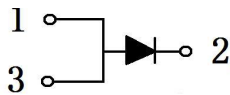
Schottky Barrier Diode in a TO-220F Plastic Package.

/ 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**

1 2 3
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	V_{RM}	100	V
Working Peak Reverse Voltage	V_{RSM}		
Average Rectified Forward Current	$I_{F(AV)}$	1×20	A
Non Repetitive Peak Surge Current	I_{FSM}	160	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	4.6	/W
Junction and Storage Temperature Range	T_j T_{stg}	-40 +150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Breakdown Voltage	V_{BR}	$I_R=1mA(Ta=25)$	100			V
Forward Voltage	V_F	$I_F=5A(Ta=25)$		0.516		V
		$I_F=10A(Ta=25)$			0.60	V
		$I_F=5A(Ta=125)$		0.455		V
		$I_F=10A(Ta=125)$			0.58	V
Instantaneous Reverse Current	I_R Note 1	$V_R=100V(Ta=25)$			150	μA
		$V_R=100V(Ta=125)$			100	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

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

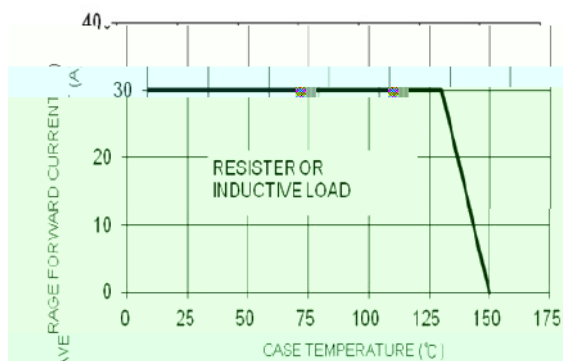


FIG.2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

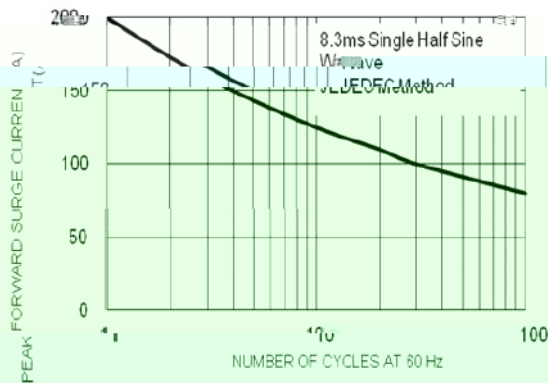


FIG.3 TYPICAL FORWARD CHARACTERISTICS PER LEG

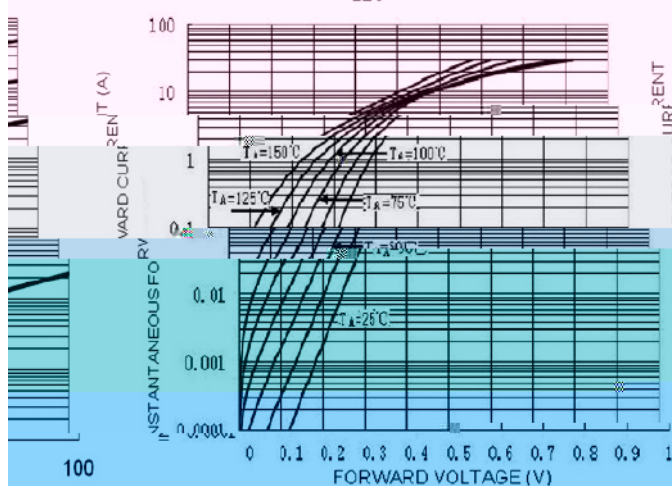
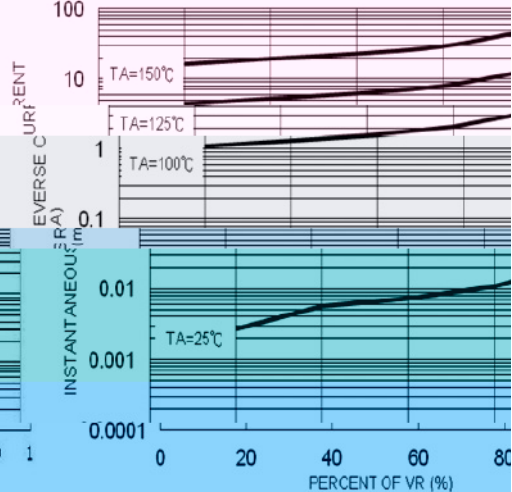
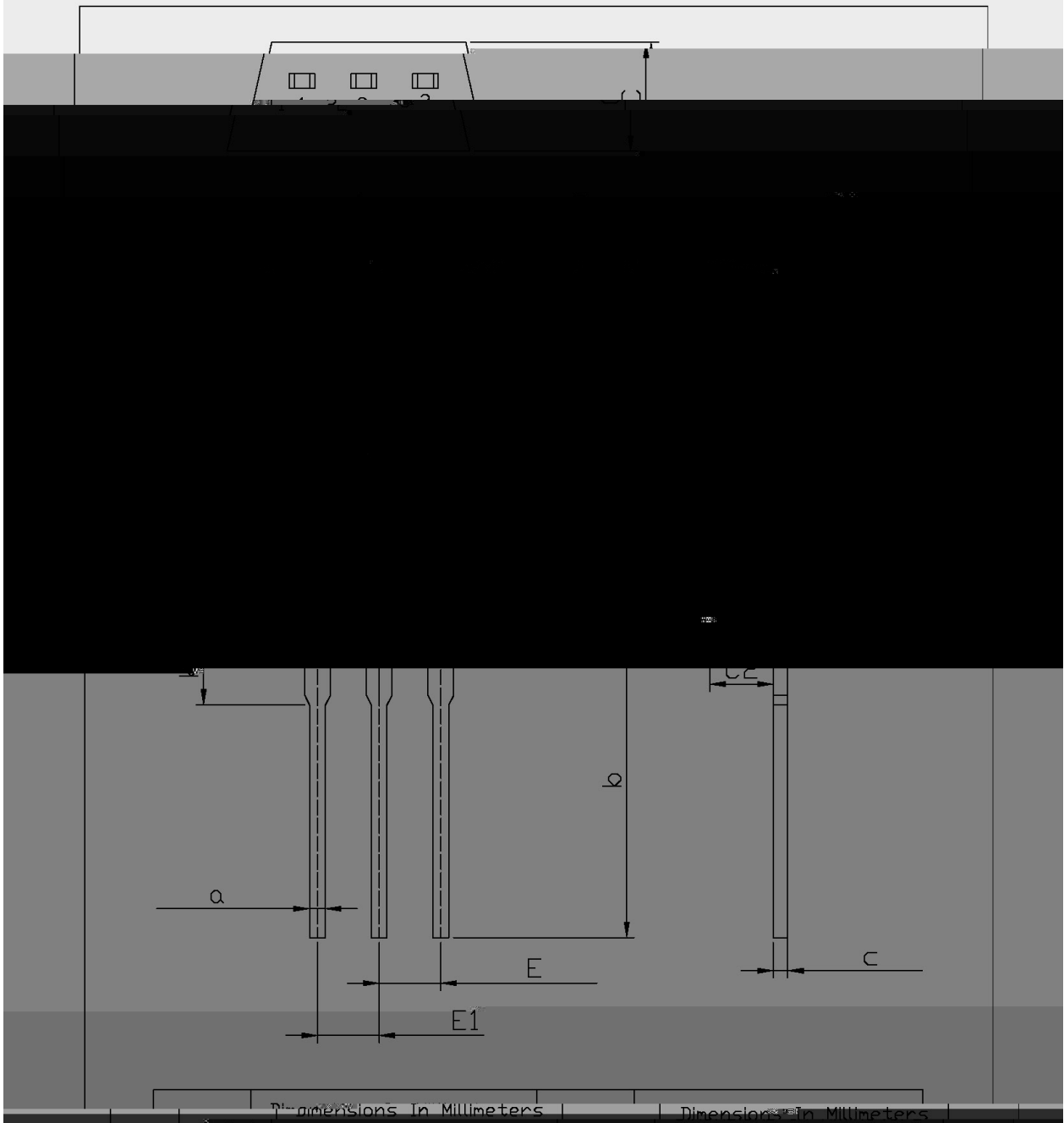


FIG.4 TYPICAL REVERSE CHARACTERISTICS PER LEG

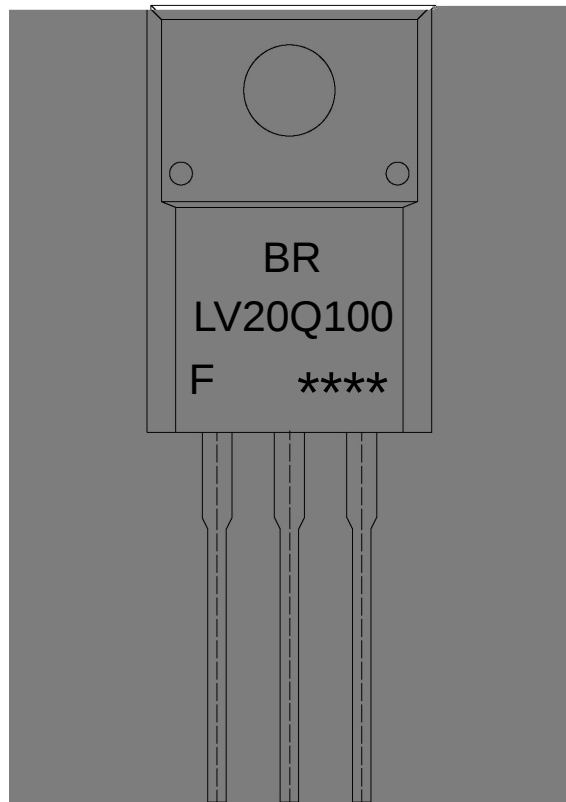


TO-220F

单位: 



/ Marking Instructions



Note:

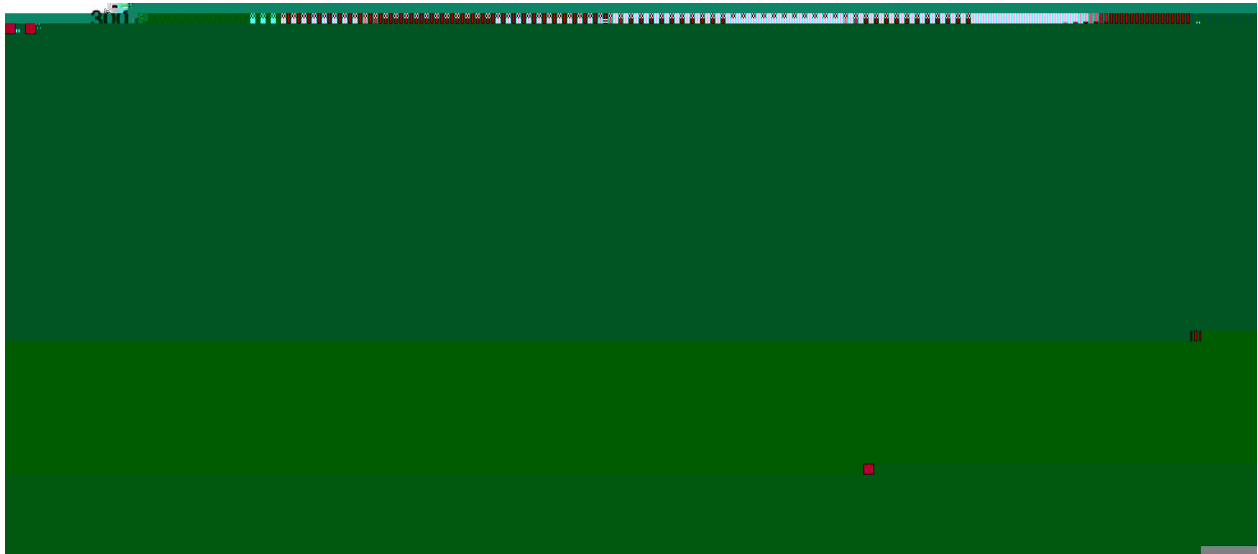
BR: Company Code

LV20Q100: Product Type

F: Package Code

****: 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 Time:10±1 sec

/ Packaging SPEC.

/ BULK

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