

## Schottky Barrier Rectifier

# LUT51D03

### Features

- ◆ Half Bridge Rectified, Common Cathode Structure.
- ◆ Multilayer Metal -Silicon Potential Structure.
- ◆ Low Power Waste, High Efficiency.
- ◆ Beautiful High Temperature Character.
- ◆ Have Over Voltage protect loop, high reliability.
- ◆ RoHs Product.

### Primary Use

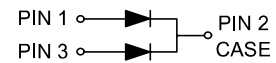
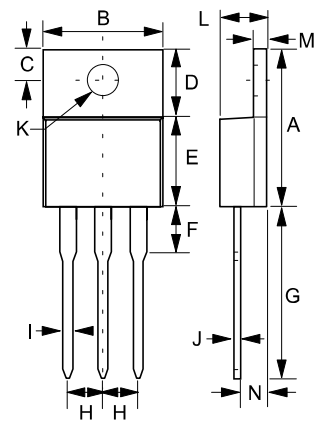
- Low Voltage High Frequency Switching Power Supply.
- Low Voltage High Frequency Invers Circuit.
- Low Voltage Continued Circuit and Protection Circuit.

### Maximum Ratings

- Operating Junction Temperature: -40°C to +125°C
- Storage Temperature: -40°C to +150°C

Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
LUT51D03	LUT51D03	100V	70V	100V

### TO-220



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.100	.135	2.54	3.43	
D	.230	.270	5.84	6.86	
E	.380	.420	9.65	10.67	
F	----	.250	----	6.35	
G	.500	.580	12.70	14.73	
H	.090	.110	2.29	2.79	
I	.020	.045	0.51	1.14	
J	.012	.025	0.30	0.64	
K	.139	.161	3.53	4.09	∅
L	.140	.190	3.56	4.83	
M	.045	.055	1.14	1.40	
N	.080	.115	2.03	2.92	

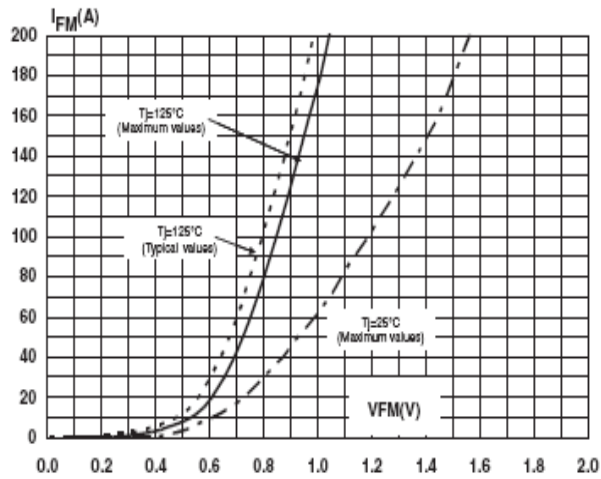
## Absolute Maximum Ratings

Item	Symbol	LUT51D03	Unit
Maximal Inverted Repetitive Peak Voltage	VRRM	100	V
Maximal DC Interdiction Voltage	VDC	100	V
Average Rectified Forward Current TC=125°C Device Unilateral	IFAV	30	A
Forward Peak Surge Current (Rated Load 8.3 Half Mssine Wave-According to JEDEC Method)	IFSM	200	A
Operating Junction Temperature	TJ	-40- +125	°C
Storage Temperature	TSTG	-40- +150	°C
Maximum Thermal Resistance Junction-to-Case	RθJC	2.0	°C/W

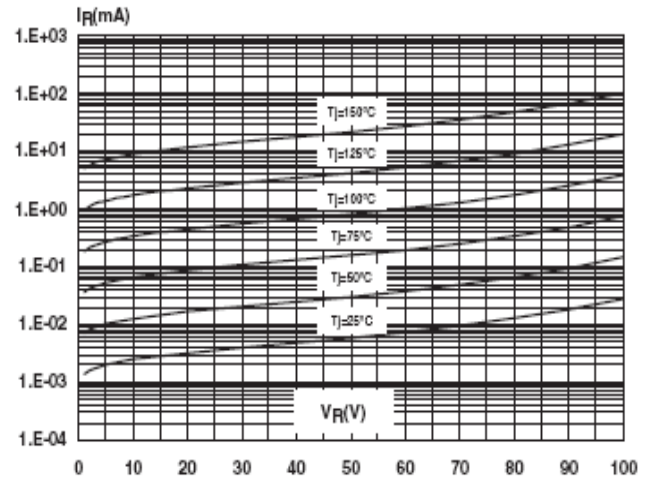
## Electricity Character

Item	Test Condition		Minimum	Representat ive	Maximum	Unit
IR	TJ =25°C	VR=VRRM			100	uA
	TJ =125°C				1	mA
VF	TJ =25°C	IF=15A			0.86	V

The forward voltage and forward current curve



The reverse leak current and the reverse voltage (single-device) curve



The crunode capacitance curve

