LITE-ON SEMICONDUCTORS

RB706F-40

SURFACE MOUNT
SCHOTTKY BARRIER DIODE

REVERSE VOLTAGE – 40 Volts
FORWARD CURRENT – 0.03 Ampere

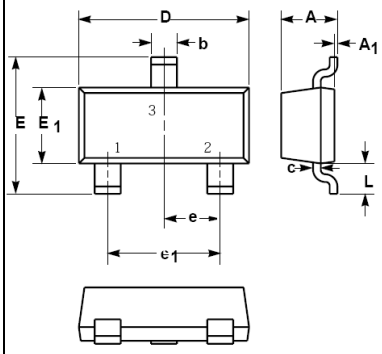
FEATURES

- Extremely Fast Switching Speed
- Low Forward Voltage
- Very Small Conduction Losses

MECHANICAL DATA

- Case: SOT-323 Plastic
- Case Material: “Green” molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture Sensitivity: Level 1 per J-STD-020D
- Lead Free in RoHS 2002/95/EC Compliant

SOT-323



SOT-323		
Dim.	Min.	Max.
A	0.90	1.10
A1	0.00	0.10
b	0.20	0.40
c	0.08	0.15
D	2.00	2.20
E	2.15	2.45
E1	1.15	1.35
e	0.65 Typ.	
e1	1.20	1.40
L	0.525 Ref.	
Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic	Symbol	RB706F-40	Units
Non-Repetitive Peak Reverse Voltage	V_{RM}	45	V
DC Blocking Voltage	V_R	40	V
Average Rectifier Forward Current	$I_{F(AV)}$	30	mA
Peak Forward Surge Current@t=8.3ms	I_{FSM}	200	mA
Power Dissipation	P_D	200	mW
Operating Temperature Range	T_J	125	℃
Storage Temperature Range	T_{STG}	-40~+125	℃

Electrical Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic	Test Condition	Symbol	RB706F-40	Unit
Reverse Breakdown Voltage	I_R = 10uA	V_{BR}	45	V
Maximum Forward Voltage	I_F = 1mA	V_F	370	mV
Maximum DC Reverse Current at Rated DC Blocking Voltage	V_R = 10V	I_R	1	uA
Typical Diode Capacitance	V_R =1.0V,f=1MHz	C_D	2	pF

REV. 1, Oct-2010, KSHR46

RATING AND CHARACTERISTIC CURVES
RB706F-40

FIG.1- TYPICAL FORWORD CHARACTERISTICS

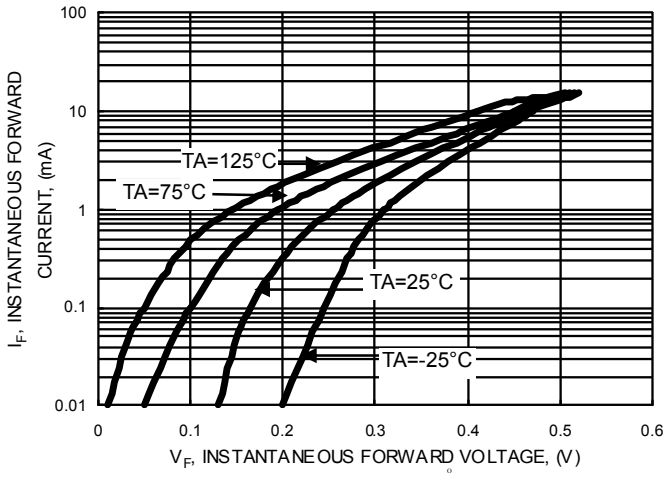


FIG.2- TYPICAL REVERSE CHARACTERISTICS

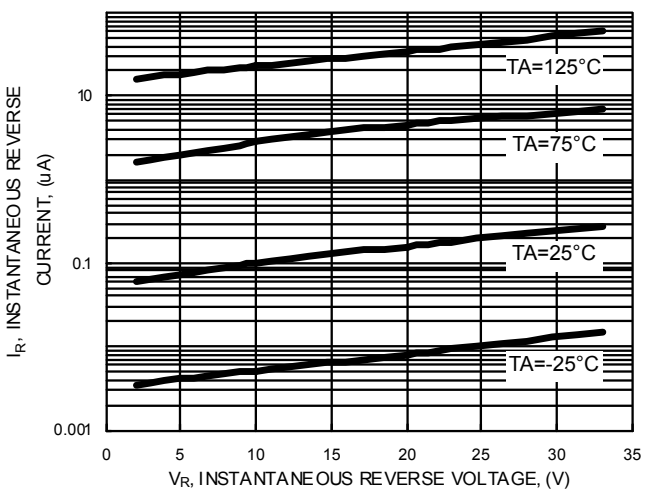


FIG.3- TYPICAL JUNCTION CAPACITANCE

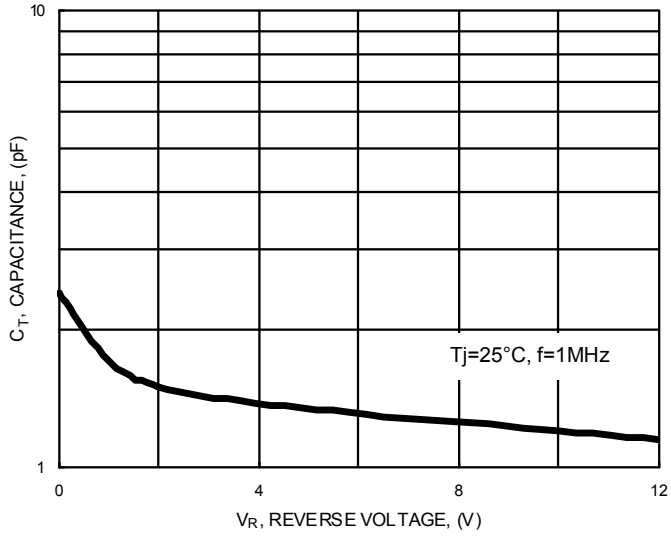
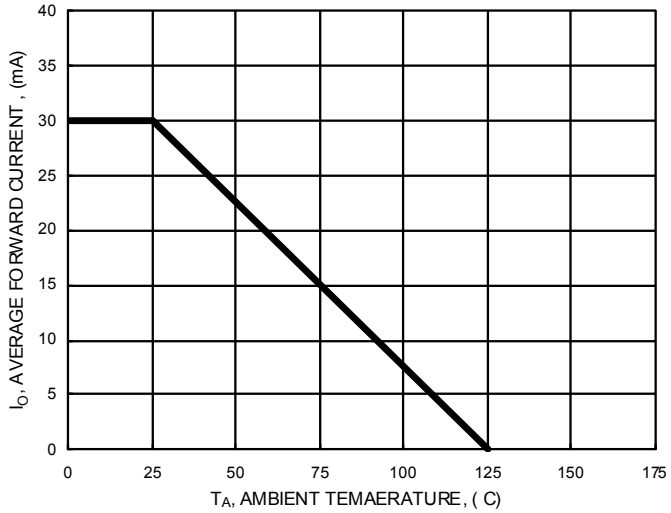
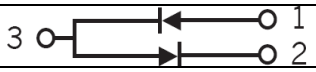


FIG.4- FORWARD CURRENT DERATING CURVE



Device Marking :

Device P/N	Marking	Equivalent Circuit Diagram
RB706F-40	3J	

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