



SURFACE MOUNT TRIPLE SCHOTTKY DIODES

This device features three electrically-isolated Schottky diodes housed in a very small SOT-23 6L package. It is ideal for applications where board space is at a premium.

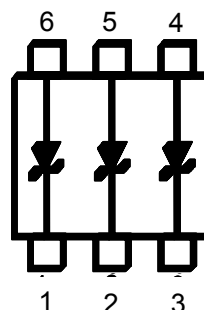
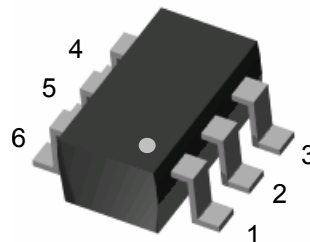
FEATURES

- Low reverse leakage current (guaranteed $<0.98\mu\text{A}$ @ 25V)
- Reverse voltage rating of 40V
- Lead-free plating (100% matte tin finish)
- 'X'fYWij Y'
- ; fYYb'a c`Xjb['Wta dci bX'Ug'dYf'97 *%&(- 'GHX'"fk Uc[Yb': fYYL

APPLICATIONS

- Mobile phones and accessories
- Video game consoles connector ports
- PDA's

SOT- 23'6L



Device Marking: 731

MAXIMUM RATINGS (Per Diode) $T_J = 25^\circ\text{C}$ Unless otherwise noted

Rating	Symbol	Value	Units
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Continuous Reverse Voltage	V_R	40	V
Average Rectified Forward Current	I_O	30	mA
Non-repetitive Peak Forward Current (60Hz, 1 cycle)	I_{FSM}	200	mA
Total Power Dissipation (Note 1)	P_{tot}	225	mW
Operating Junction Temperature Range	T_J	-55 to 125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to 150	$^\circ\text{C}$

Note 1. FR-4 Board 70 x 60 x 1mm.

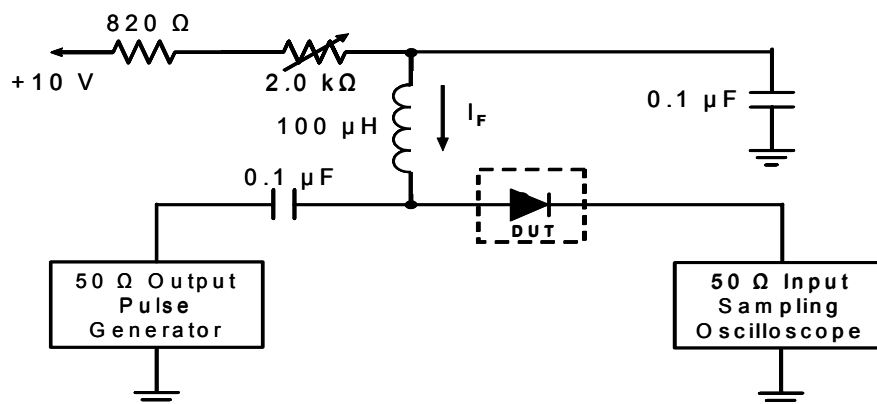
THERMAL CHARACTERISTICS

Characteristic	Symbol	Value	Units
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	556	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS (Per Diode) $T_j = 25^\circ\text{C}$ Unless otherwise noted

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Breakdown Voltage (Note 1)	V_{BR}	$I_{BR} = 10\mu\text{A}$	40	-	-	V
Forward Voltage (Note 1)	V_F	$I_F = 1\text{mA}$	-	-	370	mV
Reverse Leakage Current (Note 1)	I_R	$V_R = 25\text{V}$	-	-	0.98	μA
Total Capacitance	C_T	1Vdc Bias, $f = 1\text{MHz}$	-	2.0	5.0	pF
Reverse Recovery Time (See Figure 1)	t_{rr}	$I_F = 10\text{mA}$, $I_R = 10\text{mA}$ $R_L = 100\text{ Ohms}$; measured at $I_{R\text{rec}} = 1\text{mA}$	-	-	5.0	ns

Note 1. Short duration pulse to minimize self-heating effect



- Notes: 1. A 2.0kΩ variable resistor adjusted for a forward current (I_F) to 10mA
 2. Input pulse is adjusted to $I_{R(\text{peak})}$ is equal to 10mA

Figure 1. REVERSE RECOVERY TIME EQUIVALENT TEST CIRCUIT



TYPICAL CHARACTERISTIC CURVES (Per Diode)

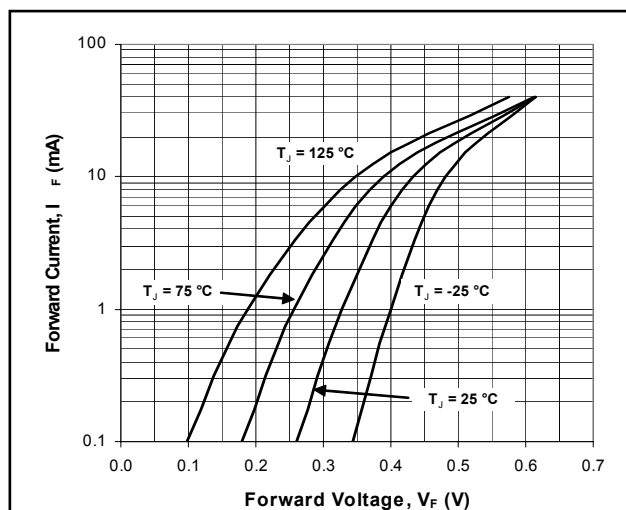


Fig. 2. Typical Forward Characteristics

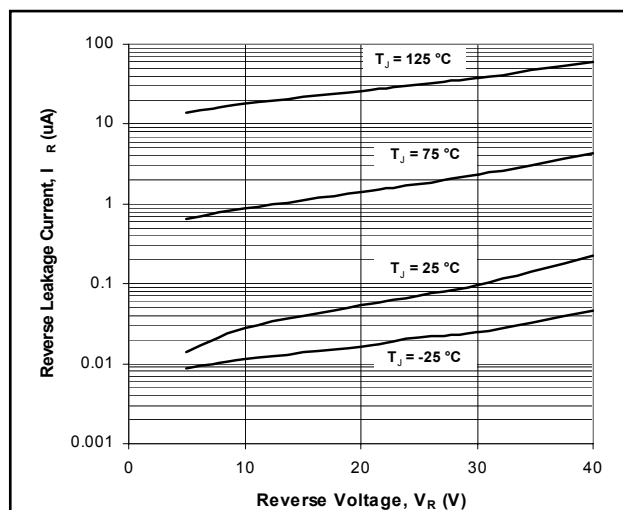


Fig. 3. Typical Reverse Characteristics

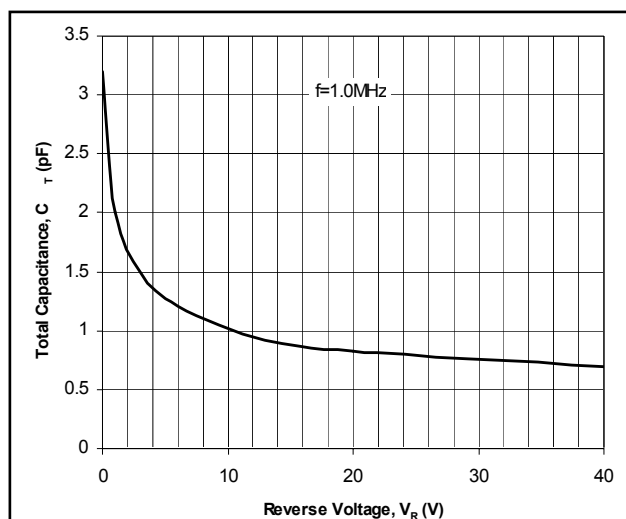


Fig. 4 Typical Capacitance

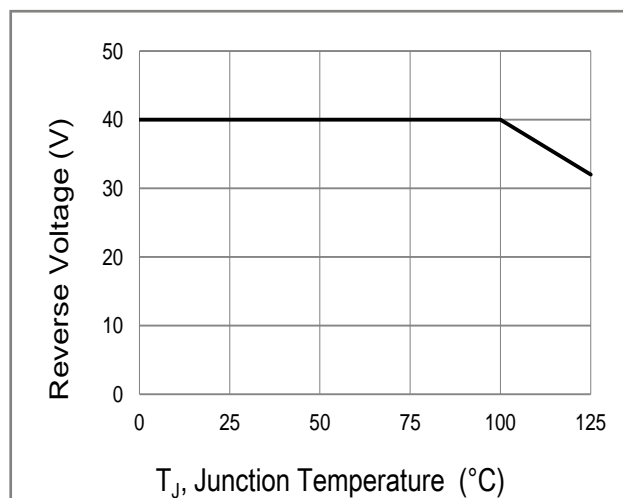
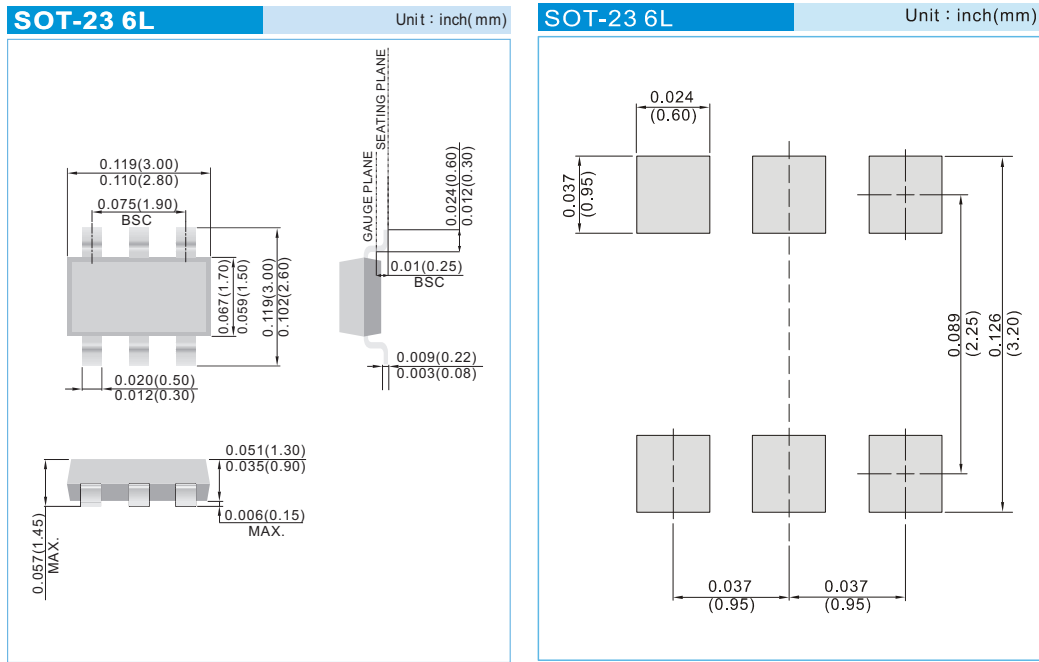


Fig.5 Operating Temperature Derating Curve

PACKAGE LAYOUT AND SUGGESTED PAD DIMENSIONS



ORDERING INFORMATION

RB731U T/R7 - 7" reel, 3K units per reel

RB731U T/R13 - 13" reel, 10K units per reel

F6+' %

Part No_packing code_Version

RB731U_R1_00001

RB731U_R2_00001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



F6 +'

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