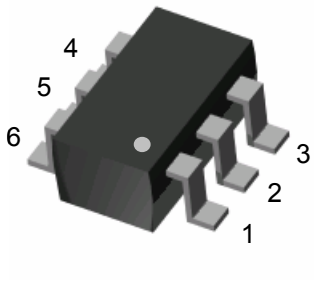
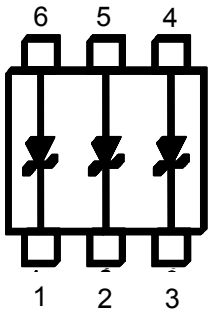
RB731U

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.

SOT- 23 6L





FEATURES

- **Low reverse leakage current (guaranteed <0.98uA @ 25V)**
- **Reverse voltage rating of 40V**
- **Lead-free plating (100% matte tin finish)**
- **Lead free in compliance with EU RoHS 2011/65/EU directive**
- **Green molding compound as per IEC61249 Std. . (Halogen Free)**

APPLICATIONS

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

Device Marking: 731

MAXIMUM RATINGS (Per Diode) T_J = 25°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	°C
Storage Temperature Range	T_{stg}	-65 to 150	°C

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

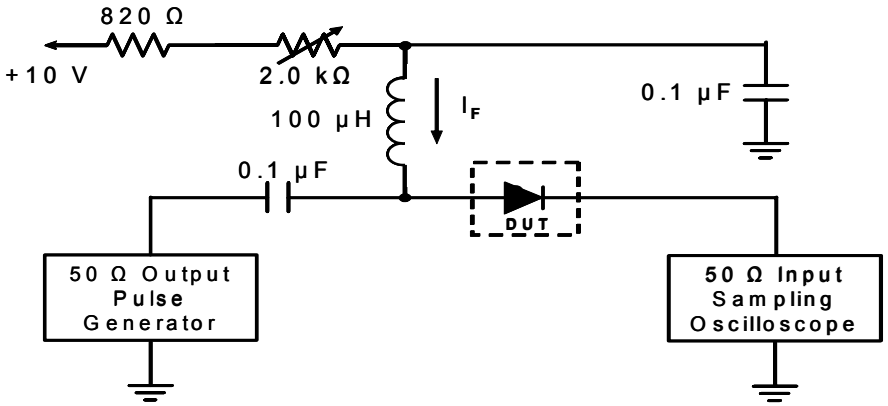
THERMAL CHARACTERISTICS

Characteristic	Symbol	Value	Units
Thermal Resistance, Junction to Ambient	$R_{thetaJA}$	556	°C/W

ELECTRICAL CHARACTERISTICS (Per Diode) Tj = 25°C Unless otherwise noted

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

Figure 1. REVERSE RECOVERY TIME EQUIVALENT TEST CIRCUIT

TYPICAL CHARACTERISTIC CURVES (Per Diode)

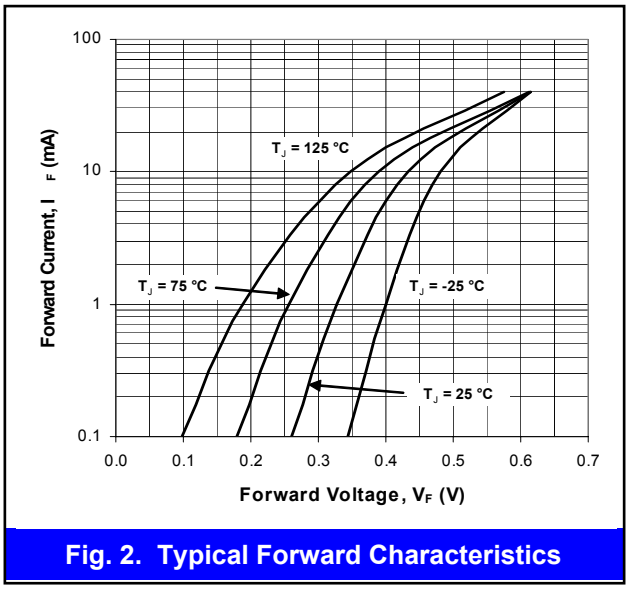


Fig. 2. Typical Forward Characteristics

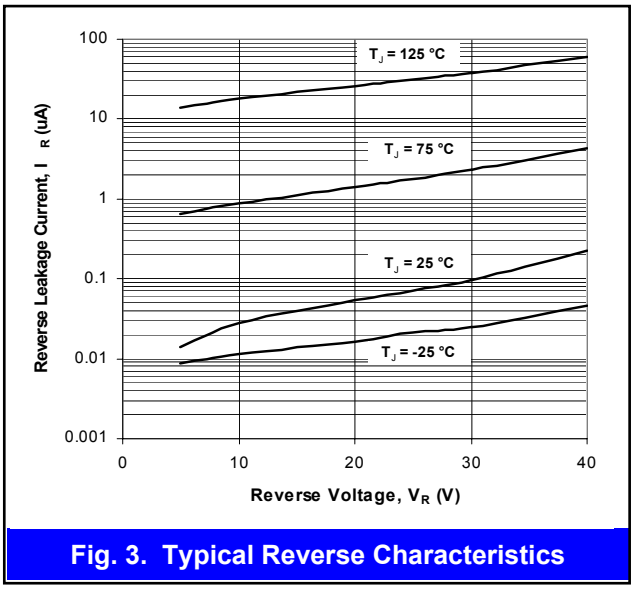


Fig. 3. Typical Reverse Characteristics

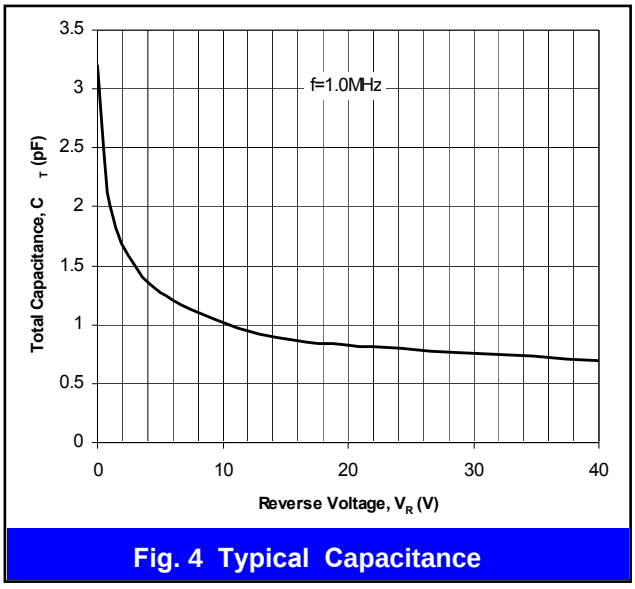


Fig. 4 Typical Capacitance

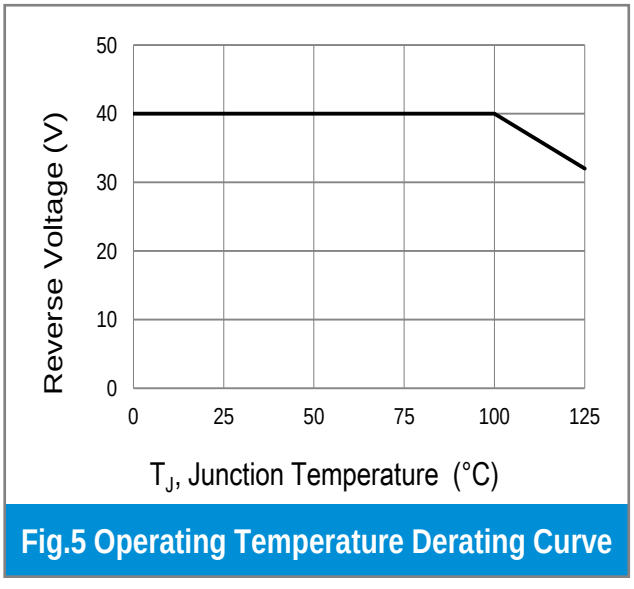
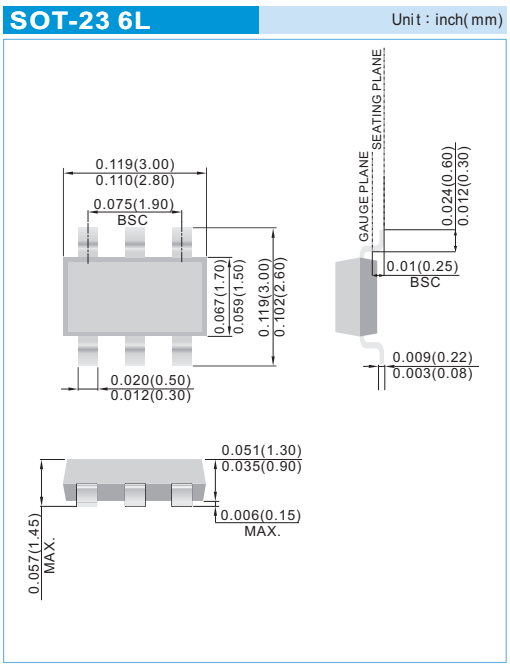
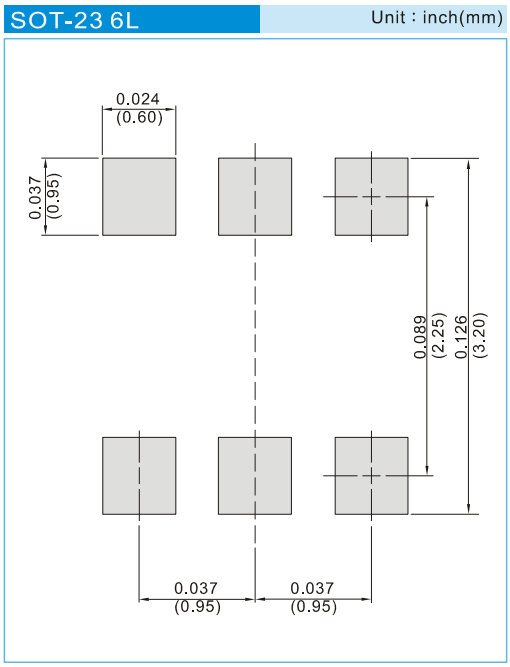


Fig.5 Operating Temperature Derating Curve

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

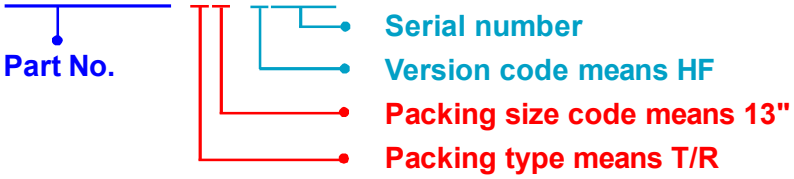
RB731U

Part No_packing code_Version

RB731U_R1_00001
RB731U_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th 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			

RB731U

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