

# **BAT54SDW**

# **SCHOTTKY BARRIER (DUAL)** DIODES

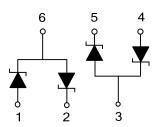
### DESCRIPTION

Planar Schottky barrier diodes are encapsulated in the SOT-363 small plastic SMD package. Single diodes and dual diodes with different pin configuration are available.

### **FEATURES**

- \* Low forward voltage
- \* Guard ring protected
- \* Small plastic SMD package

### **SYMBOL**

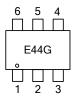


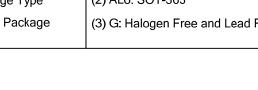
## **ORDERING INFORMATION**

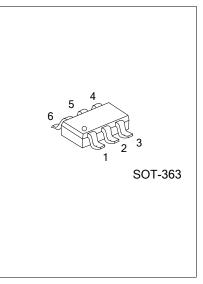
Ordering Number	Package	Pin Assignment					Dealing	
		1	2	3	4	5	6	Packing
BAT54SDWG-AL6-R	SOT-363	A1	K1	A2K2	A2	K2	A1K1	Tape Reel
Note: Pin Assignment: A: Anode K: Cathode							-	

BAT54SDW <u>Ģ-AL6-Ŗ</u>	
(1)Packing Type	(1) R: Tape Reel
(2)Package Type	(2) AL6: SOT-363
(3)Green Package	(3) G: Halogen Free and Lead Free

### MARKING







## ■ ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub> = 25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT			
PER DIODE						
Continuous Reverse Voltage	V <sub>R</sub>	30	V			
Continuous Forward Current	I <sub>F</sub>	200	mA			
Repetitive Peak Forward Current (t <sub>P</sub> <1s, δ≤0.5)	I <sub>FRM</sub>	300	mA			
Non-repetitive Peak Forward Current (t <sub>P</sub> <10ms)	I <sub>FSM</sub>	600	mA			
Junction Temperature	TJ	+125	°C			
Storage Temperature	T <sub>STG</sub>	-60 ~ +150	°C			
PER DEVICE						
Power Dissipation (T₄≤25°C)	PD	230	mW			

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

### THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ <sub>JA</sub>	625	°C/W

### ■ ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	VF	I <sub>F</sub> = 0.1mA			240	mV
		I <sub>F</sub> = 1mA			320	mV
		I <sub>F</sub> = 10mA			400	mV
		I <sub>F</sub> = 30mA			500	mV
		I <sub>F</sub> = 100mA			1000	mV
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 25V			2	μA
Reverse Recovery Time	t <sub>rr</sub>	When switched from $I_F$ =10mA to $I_R$ = 10mA, $R_L$ = 100Ω measured at $I_R$ = 1mA			5	ns
Diode Capacitance	СD	f = 1 MHz, V <sub>R</sub> = 1V;			10	pF



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