



BAT54DW

Preliminary

DIODE

SCHOTTKY BARRIER (DUAL) DIODES

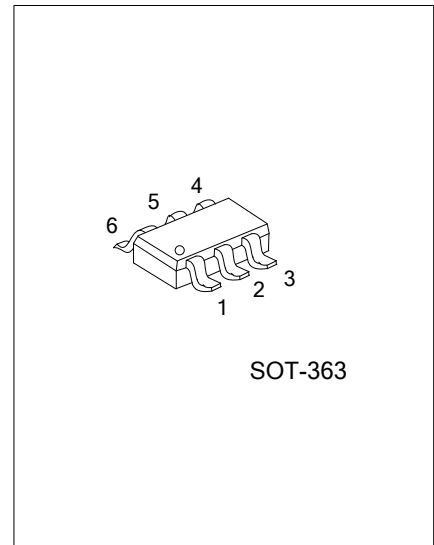
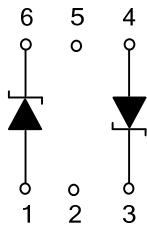
DESCRIPTION

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



SOT-363

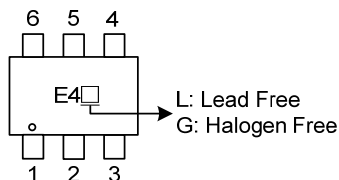
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment						Packing
Lead Free	Halogen Free		1	2	3	4	5	6	
BAT54DWL-AL6-R	BAT54DWG-AL6-R	SOT-363	A1	x	K2	A2	x	K1	Tape Reel

Note: Pin Assignment: A: Anode K: Cathode x: NC

BAT54DWL-AL6-R (1) Packing Type (2) Package Type (3) Lead Free	(1) R: Tape Reel (2) AL6: SOT-363 (3) G: Halogen Free, L: Lead Free
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MARKING



■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
PER DIODE			
Continuous Reverse Voltage	V_R	30	V
Continuous Forward Current	I_F	200	mA
Repetitive Peak Forward Current ($t_P < 1s$, $\delta \leq 0.5$)	I_{FRM}	300	mA
Non-repetitive Peak Forward Current ($t_P < 10ms$)	I_{FSM}	600	mA
Junction Temperature	T_J	+125	°C
Storage Temperature	T_{STG}	-60 ~ +150	°C
PER DEVICE			
Power Dissipation ($T_A \leq 25^\circ\text{C}$)	P_D	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_{JA}	625	°C/W

■ ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$, unless otherwise specified.)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	V_F	$I_F = 0.1\text{mA}$			240	mV
		$I_F = 1\text{mA}$			320	mV
		$I_F = 10\text{mA}$			400	mV
		$I_F = 30\text{mA}$			500	mV
		$I_F = 100\text{mA}$			1000	mV
Reverse Current	I_R	$V_R = 25\text{V}$			2	μA
Reverse Recovery Time	t_{rr}	When switched from $I_F = 10\text{mA}$ to $I_R = 10\text{mA}$, $R_L = 100\Omega$ measured at $I_R = 1\text{mA}$			5	ns
Diode Capacitance	C_D	$f = 1\text{MHz}$, $V_R = 1\text{V}$;			10	pF

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