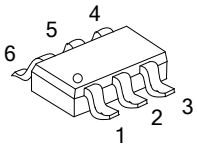
BAT54TDW

DIODE

SCHOTTKY BARRIER (DUAL) DIODES



SOT-363

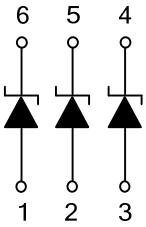
■ DESCRIPTION

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						Packing
		1	2	3	4	5	6	
BAT54TDWG-AL6-R	SOT-363	A1	A2	A3	K3	K2	K1	Tape Reel

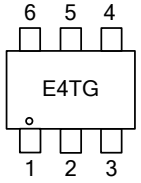
Note: Pin Assignment: A: Anode K: Cathode

BAT54TDWG-AL6-R

(1)Packing Type
(2)Package Type
(3)Green Package

(1) R: Tape Reel
(2) AL6: SOT-363
(3) G: Halogen Free and Lead Free

■ 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, δ≤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 ≤ 25°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°C, unless otherwise specified.)

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