BAT64A DIODE

# SCHOTTKY BARRIER (DUAL) DIODES

### **■ DESCRIPTION**

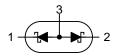
Planar Schottky barrier diodes are encapsulated in the SOT-23 small plastic SMD package. Single diodes and dual diodes with different pin configuration are available.

#### **■ FEATURES**

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

# 3 2 1 SOT-23 (JEDEC TO-236)

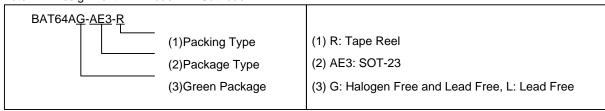
#### **■ SYMBOL**



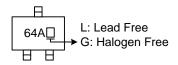
#### **■ ORDERING INFORMATION**

Ordering Number		Dardens	Pin Assignment			Da aldia a	
Lead Free	Halogen Free	Package	1	2	3	Packing	
BAT64AL-AE3-R	BAT64AG-AE3-R	SOT-23	K1	K2	A1A2	Tape Reel	

Note: Pin Assignment: A: Anode K: Cathode



#### MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT	
PER DIODE				
Continuous Reverse Voltage	$V_R$	40	V	
Continuous Forward Current	I <sub>F</sub>	250	mA	
Average rectified forward current (50/60Hz, sinus)	I <sub>FAV</sub>	120	mA	
Non-repetitive Peak Forward Current (t <sub>P</sub> <10ms)	I <sub>FSM</sub>	800	mA	
Junction Temperature	TJ	+125	°C	
Storage Temperature	T <sub>STG</sub>	-60 ~ +150	°C	
PER DEVICE				
Power Dissipation (T <sub>A</sub> ≤25°C)	P <sub>D</sub>	250	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

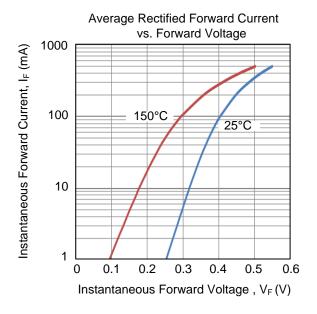
PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	$\theta_{JA}$	500	°C/W

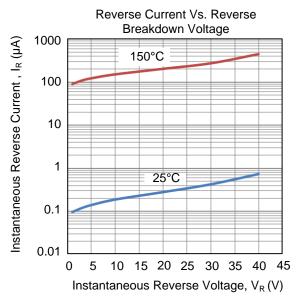
# ■ **ELECTRICAL CHARACTERISTICS** (T<sub>A</sub> = 25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage (See Fig.1)	V <sub>F</sub>	I <sub>F</sub> =1mA			350	mV
		I <sub>F</sub> =10mA			430	mV
		I <sub>F</sub> =30mA			520	mV
		I <sub>F</sub> =100mA			750	mV
Reverse Current (See Fig.2)	I <sub>R</sub>	V <sub>R</sub> =30V			2	μΑ
Reverse Recovery Time (see Fig.4)	t <sub>rr</sub>	When switched from I <sub>F</sub> =10mA				
		$I_R=10$ mA, $R_L=100\Omega$			5	ns
		measured at I <sub>R</sub> =1mA				

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#### ■ TYPICAL CHARACTERISTICS





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