



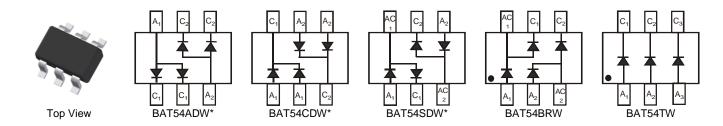
SURFACE MOUNT SCHOTTKY BARRIER DIODE ARRAYS

Features

- Low Forward Voltage Drop
- Fast Switching
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection
- Totally Lead-Free & Fully RoHS Compliant (Notes 1 & 2)
- Halogen and Antimony Free. "Green" Devise (Note 3)

Mechanical Data

- Case: SOT-363
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020D
- Terminals: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Alloy 42 Leadframe). @3
- Weight: 0.006 grams (Approximate)



*Symmetrical configuration, no orientation indicator.

Ordering Information (Note 4)

Part Number	Case	Packaging
BAT54ADW-7-F	SOT-363	3,000/Tape & Reel
BAT54CDW-7-F	SOT-363	3,000/Tape & Reel
BAT54SDW-7-F	SOT-363	3,000/Tape & Reel
BAT54BRW-7-F	3,000/Tape & Reel	
BAT54TW-7-F	SOT-363	3,000/Tape & Reel
	ive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) complia	

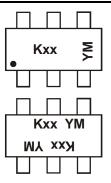
1. No purposely added lead. Fully EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant.

2. See http://www.diodes.com/quality/lead_free.html for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.

3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

4. For packaging details, go to our website at http://www.diodes.com/products/packages.html.

Marking Information



Kxx = Product Type Marking Code

For Symmetrical Configuration, No Orientation Indicator KL6 = BAT54ADW KL7 = BAT54CDW

- KL8 = BAT54SDW
- KLB = BAT54BRW KLA = BAT54TW
- YM = Date Code Marking
- Y = Year (ex: D = 2016)

M = Month (ex: 9 = September)

Date Code Key

Year	2001	2002		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Code	М	Ν		Y	Z	А	В	С	D	Е	F	G	Н	I	J
Month	Jan	Fe	b	Mar	Apr	May	Ju	n	Jul	Aug	Sep	Oc	t I	Nov	Dec
Code	1	2		3	4	5	6		7	8	9	0		Ν	D



Maximum Ratings ($@T_A = +25^{\circ}C$, unless otherwise specified.)

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	30	V
Forward Continuous Current (Note 5)	lF	200	mA
Repetitive Peak Forward Current (Note 5)	I _{FRM}	300	mA
Forward Surge Current (Note 5) @ t < 1.0s	I _{FSM}	600	mA

Thermal Characteristics

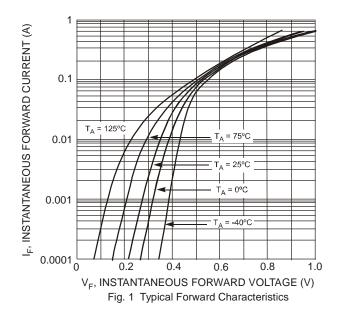
Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	PD	200	mW
Thermal Resistance, Junction to Ambient Air (Note 5)	R _{θJA}	625	°C/W
Operating and Storage Temperature Range	TJ, T _{STG}	-65 to +125	°C

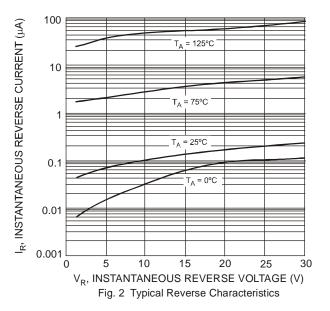
Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 6)	V _{(BR)R}	30	_	_	V	I _R = 100μA
Forward Voltage (Note 6)	VF		_	240 320 400 500 1,000	mV	$l_{F} = 0.1mA$ $l_{F} = 1mA$ $l_{F} = 10mA$ $l_{F} = 30mA$ $l_{F} = 100mA$
Reverse Leakage Current (Note 6)	I _R	_	_	2.0	μA	V _R = 25V
Total Capacitance	Ст	_	_	10	pF	V _R = 1.0V, f = 1.0MHz
Reverse Recovery Time	trr			5.0	ns	$I_F = 10mA$ through $I_R = 10mA$ to $I_R = 1.0mA$, $R_L = 100\Omega$

Notes: 5. Device mounted on FR-4 PCB, 1 inch x 0.85 inch x 0.062 inch; pad layout, which can be found on our website at http://www.diodes.com/package-outlines.html.

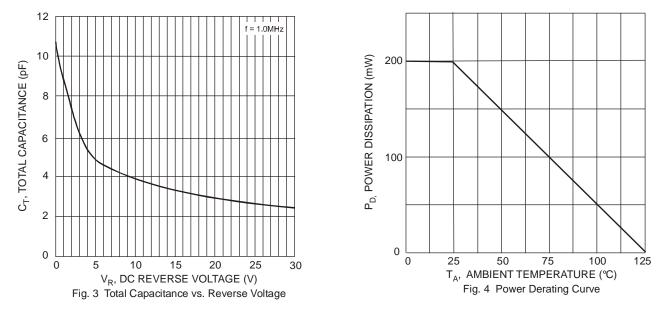
6. Short duration pulse test used to minimize self-heating effect.





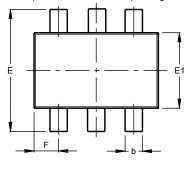


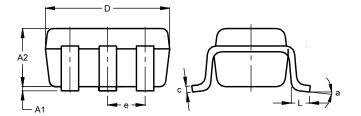
BAT54TW /ADW / CDW /SDW /BRW



Package Outline Dimensions

Please see http://www.diodes.com/package-outlines.html for the latest version.



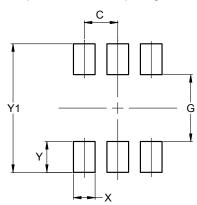


SOT363							
Dim	Min	Max	Тур				
A1	0.00	0.10	0.05				
A2	0.90	1.00	1.00				
b	0.10	0.30	0.25				
С	0.10	0.22	0.11				
D	1.80	2.20	2.15				
Е	2.00	2.20	2.10				
E1	1.15	1.35	1.30				
е	0.650 BSC						
F	0.40 0.45 0.42		0.425				
L	0.25	0.40	0.30				
а	0°						
All Dimensions in mm							



Suggested Pad Layout

Please see http://www.diodes.com/package-outlines.html for the latest version.



Dimensions	Value (in mm)
С	0.650
G	1.300
Х	0.420
Ŷ	0.600
Y1	2.500

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