



SURFACE MOUNT SCHOTTKY BARRIER DIODE ARRAYS

Features

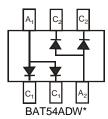
- Low Forward Voltage Drop
- Fast Switching
- Ultra-Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection
- Totally Lead-Free & Fully RoHS Compliant (Notes 1 & 2)
- Halogen and Antimony Free. "Green" Devise (Note 3)

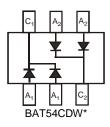
Mechanical Data

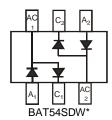
- Case: SOT-363
- Case Material: Molded Plastic.
 - UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020D
- Terminals: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Alloy 42 Leadframe). @3
- Weight: 0.006 grams (Approximate)

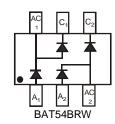


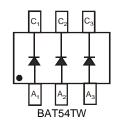
Top View











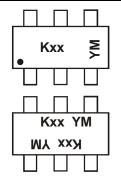
Ordering Information (Note 4)

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	SOT-363	3,000/Tape & Reel
BAT54TW-7-F	SOT-363	3,000/Tape & Reel

Notes:

- 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 = BAT54BRWKLA = BAT54TW

YM = Date Code Marking Y = Year (ex: D = 2016)

M = Month (ex: 9 = September)

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

^{*}Symmetrical configuration, no orientation indicator.



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)	l _F	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

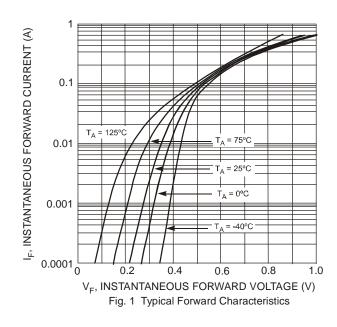
Characteristic	Symbol	Value	Unit
Power Dissipation (Note 5)	P_{D}	200	mW
Thermal Resistance, Junction to Ambient Air (Note 5)	$R_{ hetaJA}$	625	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +125	°C

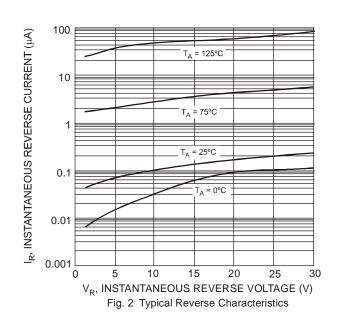
Electrical Characteristics (@T_A = +25°C, unless otherwise specified.)

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)	V _F	_	_	240 320 400 500 1,000	mV	I _F = 0.1mA I _F = 1mA I _F = 10mA I _F = 30mA I _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	t _{rr}	_	_	5.0	ns	$I_F = 10$ mA through $I_R = 10$ mA to $I_R = 1.0$ mA, $R_L = 100$ Ω

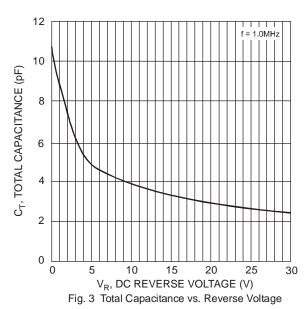
Notes:

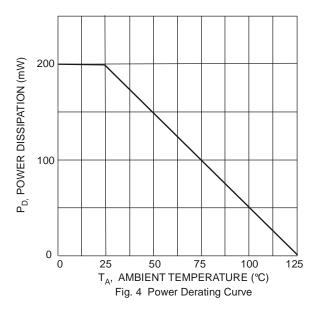
- 5. Device mounted on FR-4 PCB, 1 inch x 0.85 inch x 0.062 inch; pad layout, which can be found on our website at http://www.diodes.com/package-outlines.html.
- 6. Short duration pulse test used to minimize self-heating effect.





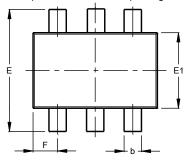


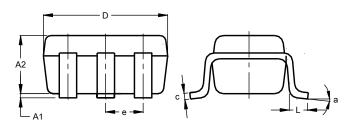




Package Outline Dimensions

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



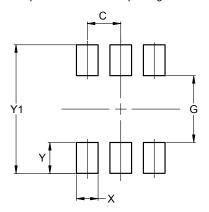


SOT363								
Dim	Min	Max	Тур					
A1	0.00	0.10	0.05					
A2	0.90	1.00	1.00					
b	0.10	0.30	0.25					
С	0.10	0.22	0.11					
D	1.80	2.20	2.15					
Е	2.00	2.20	2.10					
E1	1.15	1.35	1.30					
е	e 0.650 BSC							
F	0.40	0.45	0.425					
L	0.25	0.40	0.30					
а	0°	8°						
All Dimensions in mm								



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				
Y	0.600				
Y1	2.500				

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многоканальный

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001 Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

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Офис по работе с юридическими лицами:

105318, г. Москва, ул. Щербаковская д. 3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru moschip.ru_6 moschip.ru 4 moschip.ru 9