



BAT400D

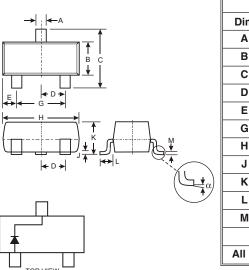
0.5A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

Low Forward Voltage Drop High Conductance Lead Free by Design/RoHS Compliant (Note 3) Qualified to AEC-Q101 Standards for High Reliability

Mechanical Data

Case: SOT-23 Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 Moisture Sensitivity: Level 1 per J-STD-020C Terminals: Solderable per MIL-STD-202, Method 208 Lead Free Plating (Matte Tin Finish annealed over Alloy 42 leadframe). Polarity: See Diagram Marking: KSJ and Date Code, See Page 3 Ordering Information: See Page 3 Weight: 0.008 grams (approximate)



	SOT-23										
Dim	Min	Max									
Α	0.37	0.51									
В	1.20	1.40									
С	2.30	2.50									
D	0.89	1.03									
E	0.45	0.60									
G	1.78	2.05									
н	2.80	3.00									
J	0.013	0.10									
К	0.903	1.10									
L	0.45	0.61									
м	0.085	0.180									
	0	8									
All Dir	nensions	in mm									

Maximum Ratings @ T_A = 25 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	40	V
RMS Reverse Voltage	V _{R(RMS)}	28	V
Average Rectified Current (Note 2)	lo	0.5	А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load	I _{FSM}	3	А
Power Dissipation (see Figure 1) (Note 2)	Pd	480	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 2)	R _{JA}	286	°C/W
Operating and Storage Temperature Range	Tj, T _{STG}	-40 to +125	С

Electrical Characteristics @ T_A = 25 C unless otherwise specified

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 1)	V _{(BR)R}	40			V	I _R = 1mA
Forward Voltage	VF		285 480	300 550	mV	$I_F = 10mA$ $I_F = 500mA$
Reverse Current (Note 1)	I _R		1.0 2.0	30 50	A A	$V_R = 10V$ $V_R = 30V$
Total Capacitance	Ст		125 20		pF pF	$\label{eq:VR} \begin{array}{l} V_R = 0V, \ f = 1.0MHz \\ V_R = 10V, \ f = 1.0MHz \end{array}$

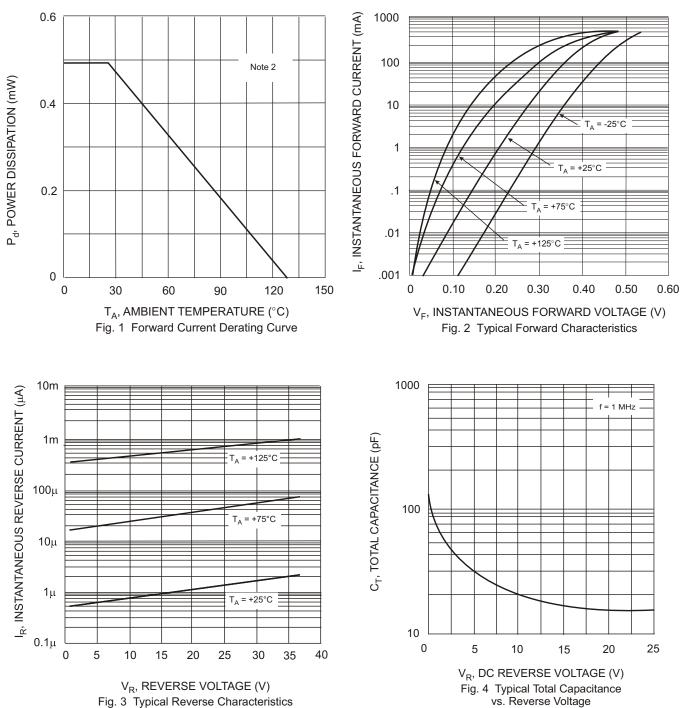
Notes: 1. Short duration test pulse used to minimize self-heating effect.

2. Part mounted on FR-4 board with recommended pad layout, which can be found on our website

at http://www.diodes.com/datasheets/ap02001.pdf.

3. No purposefully added lead.







Ordering Information (Note 4)

Device	Packaging	Shipping
BAT400D-7-F	SOT-23	3000/Tape & Reel

Notes: 4. For Packaging Details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

Marking Information



KSJ = Product Type Marking Code YM = Date Code Marking Y = Year ex: N = 2002 M = Month ex: 9 = September

Date Code Key

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Code	J	к	L	М	Ν	Р	R	S	Т	U	V	W	Х	Y	Z

Mon	th	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Coc	le	1	2	3	4	5	6	7	8	9	0	N	D

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