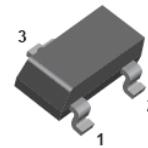


Dual Series Schottky Barrier Diodes

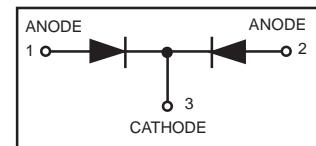
These Schottky barrier diodes are designed for high speed switching applications, circuit protection, and voltage clamping. Extremely low forward voltage reduces conduction loss. Miniature surface mount package is excellent for hand held and portable applications where space is limited.

- Extremely Fast Switching Speed
- Low Forward Voltage — 0.35 Volts (Typ) @ $I_F = 10 \text{ mA}$

Dimensions SOT-323



Pin Configuration



DEVICE MARKING

BAT54CW=L43

MAXIMUM RATINGS ($T_J = 125^\circ\text{C}$ unless otherwise noted)

Rating	Symbol	Value	Unit
Reverse Voltage	V_R	30	Volts
Forward Power Dissipation @ $T_A = 25^\circ\text{C}$	P_F	225	mW
Derate above 25°C		1.8	mW/ $^\circ\text{C}$
Forward Current(DC)	I_F	200Max	mA
Junction Temperature	T_J	125Max	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

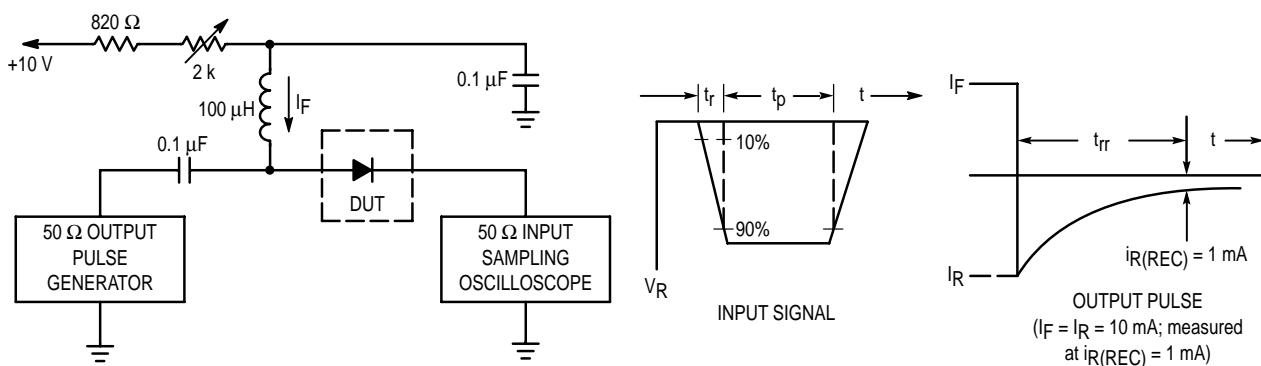
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage ($I_R = 10 \mu\text{A}$)	$V_{(BR)R}$	30	—	—	Volts
Total Capacitance ($V_R = 1.0 \text{ V}$, $f = 1.0 \text{ MHz}$)	C_T	—	7.6	16	pF
Reverse Leakage ($V_R = 25 \text{ V}$)	I_R	—	0.5	2.0	μA
Forward Voltage ($I_F = 0.1 \text{ mA}$)	V_F	—	0.22	0.24	Vdc
Forward Voltage ($I_F = 30 \text{ mA}$)	V_F	—	0.41	0.5	Vdc
Forward Voltage ($I_F = 100 \text{ mA}$)	V_F	—	0.52	1	Vdc
Reverse Recovery Time ($I_F = I_R = 10 \text{ mA}$, $I_{R(REC)} = 1.0 \text{ mA}$, Figure 1)	t_{rr}	—	—	5.0	ns
Forward Voltage ($I_F = 1.0 \text{ mA}$)	V_F	—	0.29	0.32	Vdc
Forward Voltage ($I_F = 10 \text{ mA}$)	V_F	—	0.35	0.40	Vdc
Forward Current (DC)	I_F	—	—	200	mA
Repetitive Peak Forward Current	I_{FPM}	—	—	300	mA
Non-Repetitive Peak Forward Current ($t < 1.0 \text{ s}$)	I_{FSM}	—	—	600	mA



Leiditech

BAT54CW



- Notes:
1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
 2. Input pulse is adjusted so $I_R(\text{peak})$ is equal to 10 mA.
 3. $t_p \gg t_{rr}$

Figure 1. Recovery Time Equivalent Test Circuit

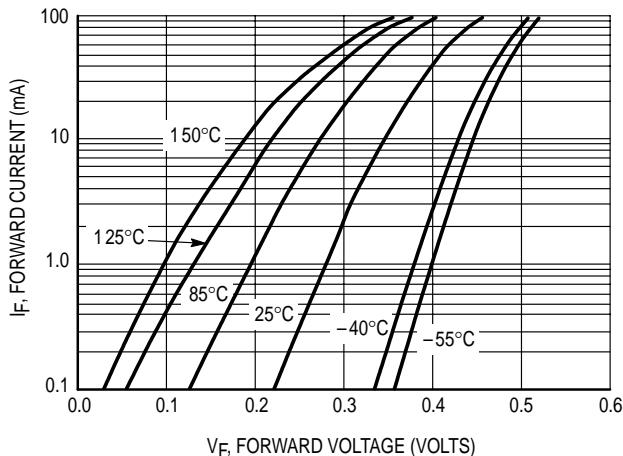


Figure 2. Forward Voltage

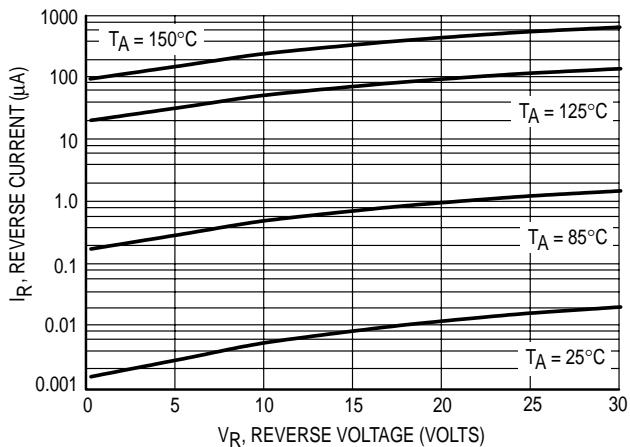


Figure 3. Leakage Current

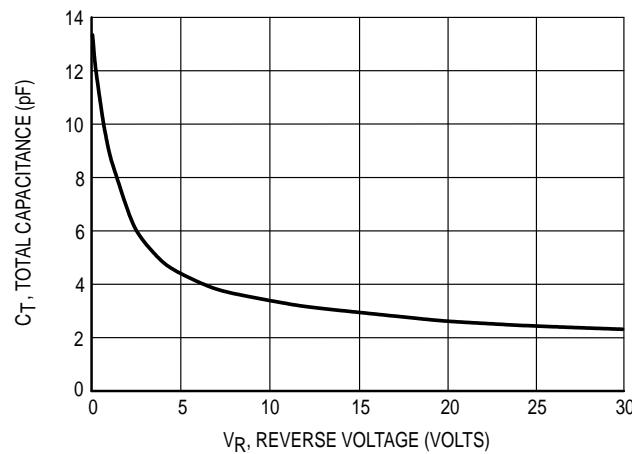
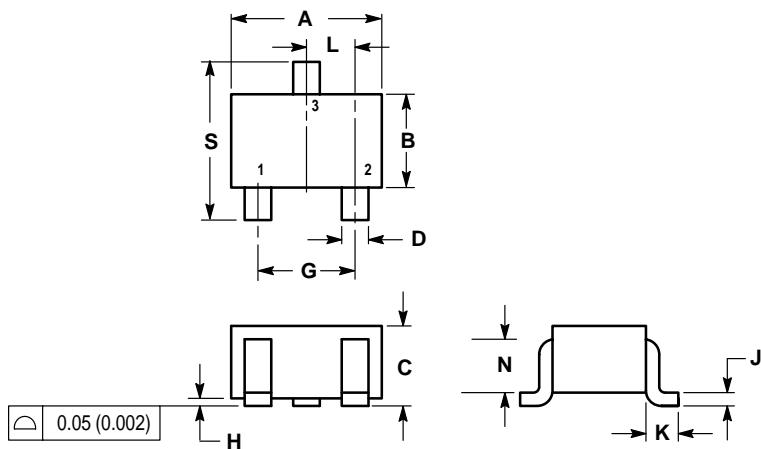


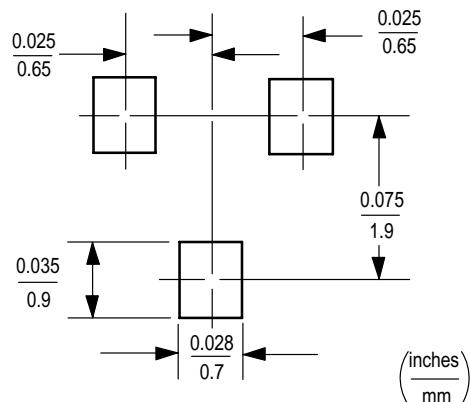
Figure 4. Total Capacitance

SC-70 / SOT-323
NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.071	0.087	1.80	2.20
B	0.045	0.053	1.15	1.35
C	0.032	0.040	0.80	1.00
D	0.012	0.016	0.30	0.40
G	0.047	0.055	1.20	1.40
H	0.000	0.004	0.00	0.10
J	0.004	0.010	0.10	0.25
K	0.017	REF	0.425	REF
L	0.026	BSC	0.650	BSC
N	0.028	REF	0.700	REF
S	0.079	0.095	2.00	2.40



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Schottky Diodes & Rectifiers category:

Click to view products by Leiditech manufacturer:

Other Similar products are found below :

[MA4E2039](#) [MA4E2508M-1112](#) [MBR10100CT-BP](#) [MBR1545CT](#) [MMBD301M3T5G](#) [GS1JE-TP](#) [RB160M-50TR](#) [BAS16E6433HTMA1](#)
[BAS 3010S-02LRH E6327](#) [BAT 54-02LRH E6327](#) [NSR05F40QNXT5G](#) [NSVR05F40NXT5G](#) [NTE555](#) [JANS1N6640](#) [SB07-03C-TB-H](#)
[SK310-T](#) [SK33A-TP](#) [SK34B-TP](#) [SS3003CH-TL-E](#) [PDS3100Q-7](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM\)](#) [MA4E2501L-1290](#)
[MBRB30H30CT-1G](#) [DMJ3940-000](#) [SB007-03C-TB-E](#) [SK32A-TP](#) [SK33B-TP](#) [SK35A-TP](#) [SK38B-LTP](#) [SK38B-TP](#) [NRVBM120LT1G](#)
[NTE505](#) [NTSB30U100CT-1G](#) [VS-6CWQ10FNHM3](#) [CRG04\(T5L,TEMQ\)](#) [ACDBA1100LR-HF](#) [ACDBA1200-HF](#) [ACDBA2100-HF](#)
[ACDBA240-HF](#) [ACDBA3100-HF](#) [CDBQC0530L-HF](#) [ACDBA260LR-HF](#) [ACDBA1100-HF](#) [MA4E2502L-1246](#) [10BQ060-M3/5BT](#)
[NRVB130LSFT1G](#) [CRS08TE85LQM](#) [PMAD1108-LF](#) [B120Q-13-F](#)