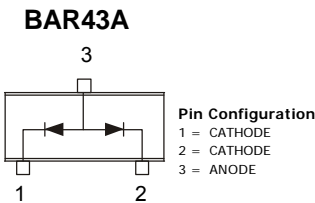
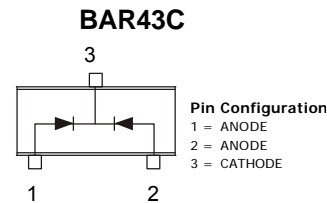
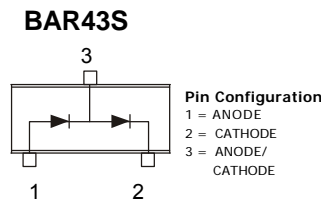
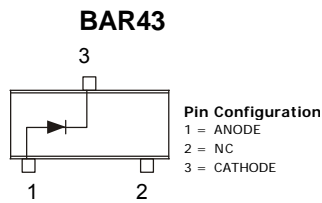
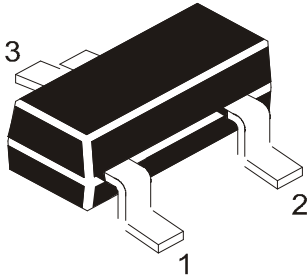


SILICON PLANAR SCHOTTKY DIODES

**BAR43, BAR43A
BAR43C, BAR43S**

**SOT-23
Formed SMD Package**



**BAR43= D95
BAR43A=DB1
BAR43C=DB2
BAR43S=DA5**

General Purpose, metal to Silicon Diodes Featuring Very Low Turn-on Voltage and Fast Switching

ABSOLUTE MAXIMUM RATINGS (see note 1)

DESCRIPTION	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Forward Current	I_F	100	mA
Repetitive Peak Forward Current	I_{FRM}	350	mA
Surge Non Repetitive Forward Current	I_{FSM}	750	mA
Power Dissipation $T_a=25^\circ\text{C}$ (see note 2)	$*P_D$	160	mW
Storage Temperature Range	T_{stg}	- 55 to +150	$^\circ\text{C}$
Junction Temperature	T_j	125	$^\circ\text{C}$

THERMAL RESISTANCE (see note 3)

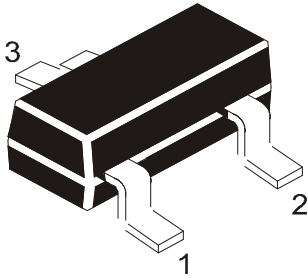
Junction to Ambient in free air	$*R_{th(j-a)}$	625	$^\circ\text{C}/\text{W}$
Junction to Substrate	$R_{th(j-SR)}$	400	$^\circ\text{C}/\text{W}$

*Mounted on a ceramic substrate: 7 x 5 x 0.5mm

Note:- 1 For double diodes maximum ratings apply to each diode, provided that rated P_D is not exceeded
2 For double diodes P_D is the total power dissipation of the two diodes
3 For double diodes R_{th} refer to the total power dissipation in the two diodes and is given independently of the power distribution in the two diodes

SILICON PLANAR SCHOTTKY DIODES

BAR43, BAR43A
BAR43C, BAR43S



SOT-23
Formed SMD Package

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

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=100\mu\text{A}$	30		V
Forward Voltage	V_F	$I_F=2\text{mA}$	0.26	0.33	V
		$I_F=15\text{mA}$		0.45	V
		$I_F=100\text{mA}$		1.00	V
Reverse Current	I_R	$V_R=25\text{V}$		500	nA
		$V_R=25\text{V}, T_a=100^\circ\text{C}$		100	μA

DYNAMIC CHARACTERISTICS

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Diode Capacitance	C	$V_R=1\text{V}, f=1\text{MHz}$	TYP 7		pF
Reverse Recovery Time When Switched From	t_{rr}	$I_F=10\text{mA}, \text{to}$ $I_R=10\text{mA},$ $I_{RR}=1\text{mA}, R_L=100\Omega$		5	ns

BAR43_A_C_S Rev300403E

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
SOT-23 T&R	3K/reel	136 gm/3K pcs	3" x 7.5" x 7.5"	12.0K	17" x 15" x 13.5"	192.0K	12 kgs
			9" x 9" x 9"	51.0K	19" x 19" x 19"	408.0K	28 kgs
	10K/reel	415 gm/10K pcs	13" x 13" x 0.5"	10.0K	17" x 15" x 13.5"	300.0K	16 kgs

Customer Notes

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



CDIL is a registered Trademark of
Continental Device India Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.

Telephone + 91-11-2579 6150, 4141 1112 Fax + 91-11-2579 5290, 4141 1119

email@cdil.com www.cdilsemi.com