

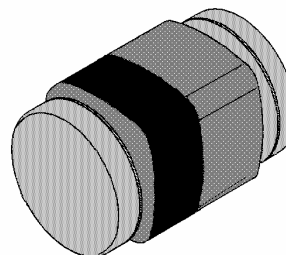
BAT54R

SCHOTTKY BARRIER DIODE

LS-31

Features

- Low forward voltage
- Guard ring protected
- Fits onto SOD 323 / SOT 23 footprints
- Micro Melf package



Applications

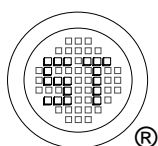
- Ultra high-speed switching
- Voltage clamping
- Protection circuits
- Blocking diodes

Absolute Maximum Ratings ($T_j = 25^{\circ}\text{C}$)

Parameter	Test	Symbol	Value	Unit
Reverse Voltage		V_R	30	V
Peak Forward Surge Current	$t_p = 10\text{mS}$	I_{FSM}	600	mA
Repetitive Peak Forward Current		I_{FRM}	300	mA
Forward Current		I_F	200	mA
Power Dissipation	$T_{amb} 25^{\circ}\text{C}$	P_V	230	mW
Junction Temperature		T_J	125	$^{\circ}\text{C}$
Storage Temperature Range		T_s	-65 ... +150	$^{\circ}\text{C}$

Maximum Thermal Resistance ($T_j = 25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Thermal Resistance From Junction Ambient	R_{thJA}	500	K/W



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 71116



ISO 9001:2000
Certificate No. 0506098

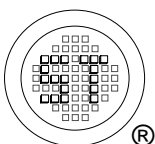
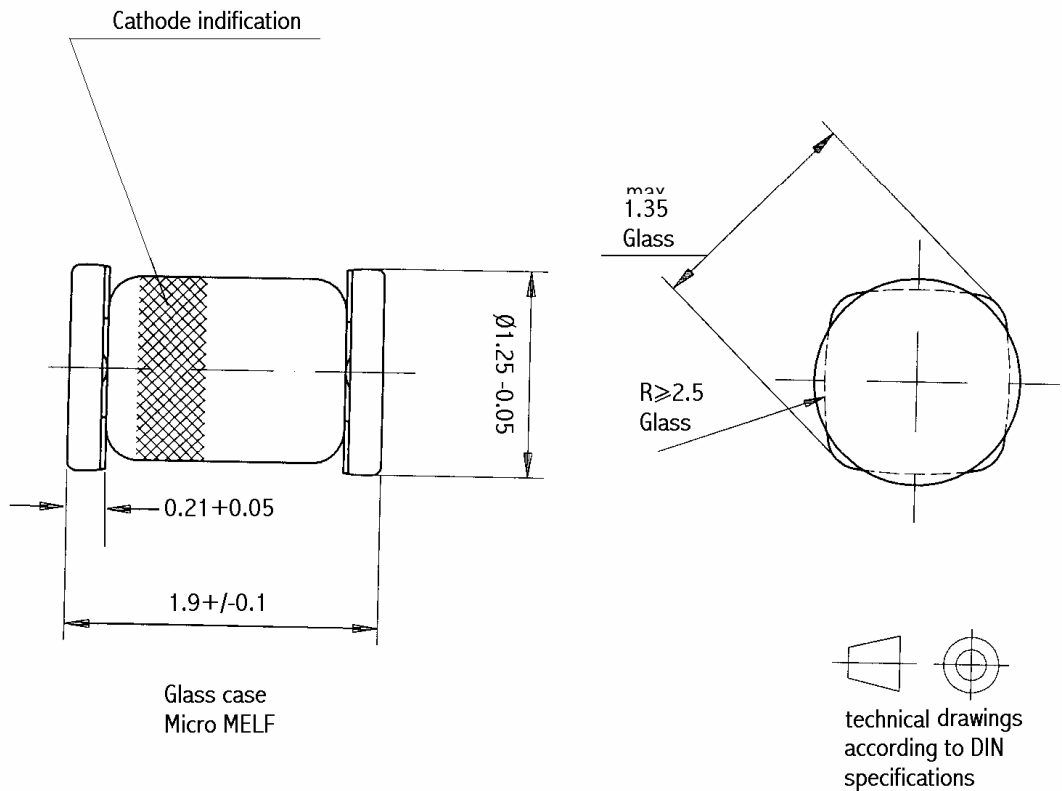
Dated : 05/05/2003

BAT54R

Characteristics at $T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Forward Voltage	$I_F = 0.1\text{mA}$	V_F	-	-	240	mV
	$I_F = 1\text{mA}$	V_F	-	-	320	mV
	$I_F = 10\text{mA}$	V_F	-	-	400	mV
	$I_F = 30\text{mA}$	V_F	-	-	500	mV
	$I_F = 100\text{mA}$	V_F	-	-	800	mV
Reverse Current	$V_R = 25\text{V}$	I_R	-	-	2	μA
Diode Capacitance	$V_R = 1\text{V}, f = 1\text{MHz}$	C_D	-	-	10	pF
Reverse Recovery Time	$I_F = 10\text{mA}, V_R = 6\text{V}, i_R = 10\text{mA}$ $R_L = 100\Omega$	t_{rr}	-	-	6	ns

Dimensions in mm



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