

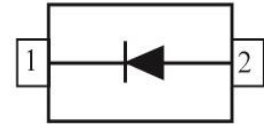
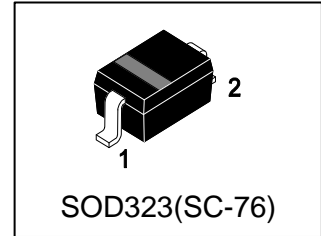
# BAT54H

## S-BAT54H

### Schottky Barrier Diode

#### 1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- Extremely Fast Switching Speed
- Low Forward Voltage — 0.35 Volts (Typ) @ IF = 10 mAdc



#### 2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
BAT54H	JV	3000/Tape&Reel

#### 3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Reverse Voltage	VR	30	Vdc
Forward Current	IF	200	mAdc

#### 4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	200 1.57	mW mW/°C
Thermal Resistance, Junction-to-Ambient(Note 1)	RθJA	635	°C/W
Junction and Storage temperature	TJ,Tstg	-55~+125	°C

1. FR-5 = 1.0×0.75×0.062 in.

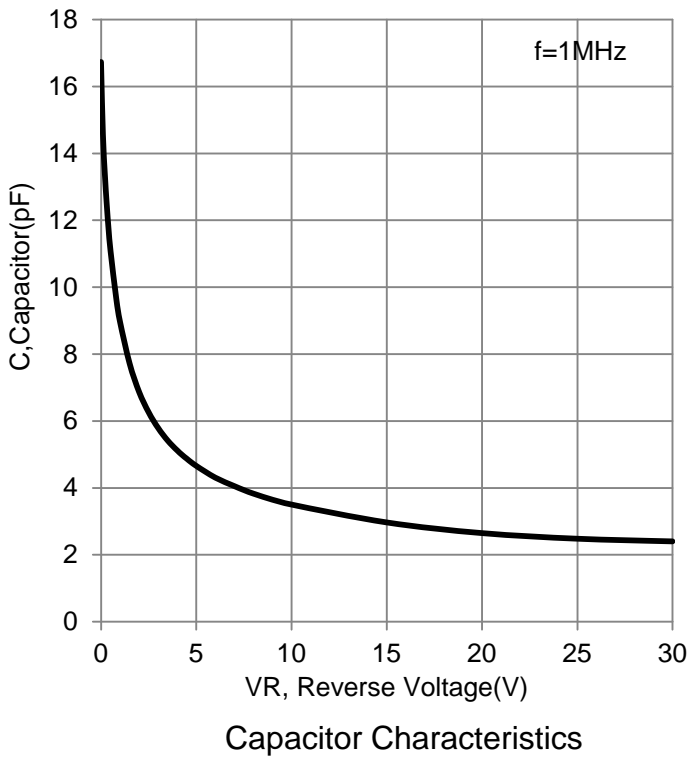
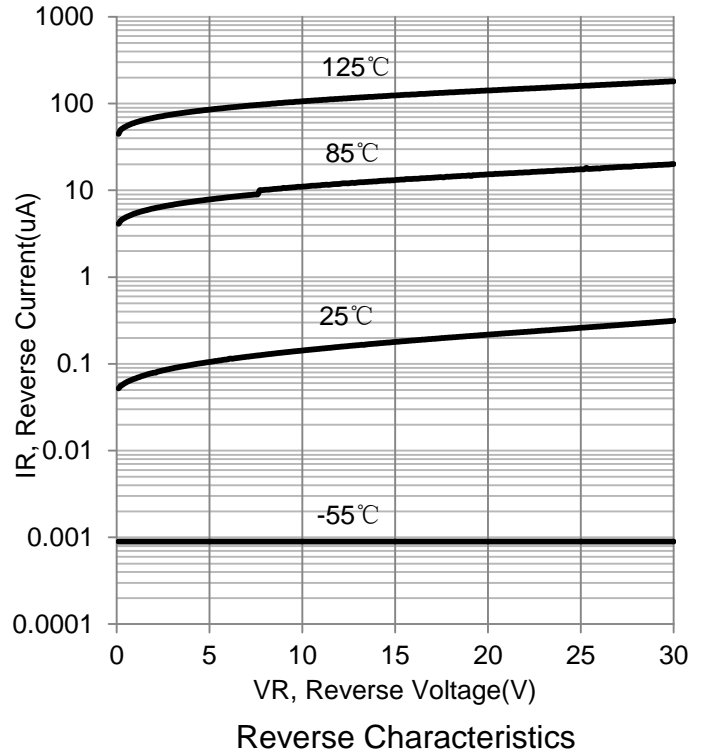
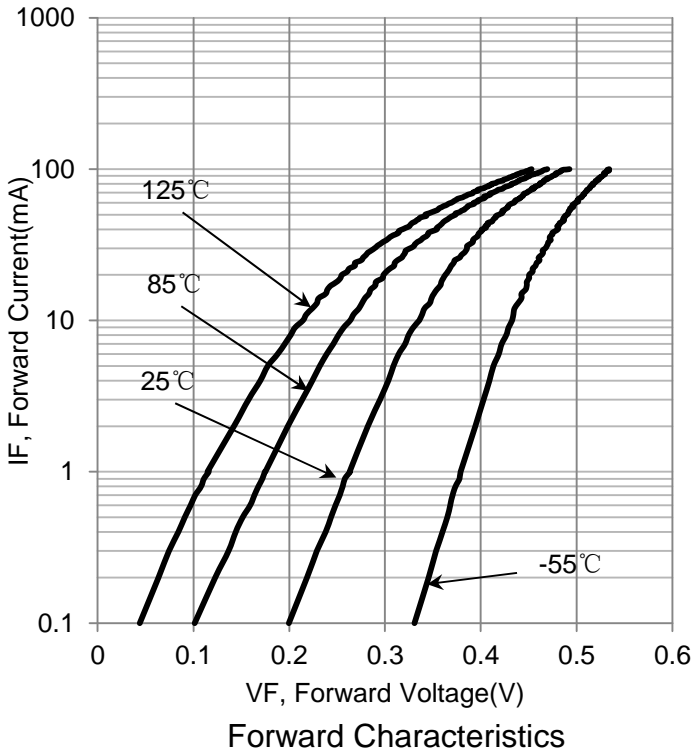


## 5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (IR = 10 $\mu$ A <sub>dc</sub> )	VBR	30	-	-	V
Reverse Voltage Leakage Current (VR = 25V <sub>dc</sub> )	IR	-	0.5	2	$\mu$ A
Diode Capacitance (VR =1.0V , f = 1.0 MHz)	CT	-	-	10	pF
Forward Voltage (IF = 0.1 mA <sub>dc</sub> ) (IF = 1 mA <sub>dc</sub> ) (IF = 10 mA <sub>dc</sub> ) (IF = 30 mA <sub>dc</sub> ) (IF = 100 mA <sub>dc</sub> )	VF	-	0.22 0.29 0.35 0.41 0.52	0.24 0.32 0.4 0.5 1	V
Reverse Recovery Time (IF = IR = 10 mA <sub>dc</sub> , IR(REC) = 1.0 mA <sub>dc</sub> )	trr	-	-	5	ns
Repetitive Peak Forward Current	IFRM	-	-	300	mA
Non-Repetitive Peak Forward Current (t < 1.0 s)	IFSM	-	-	600	mA



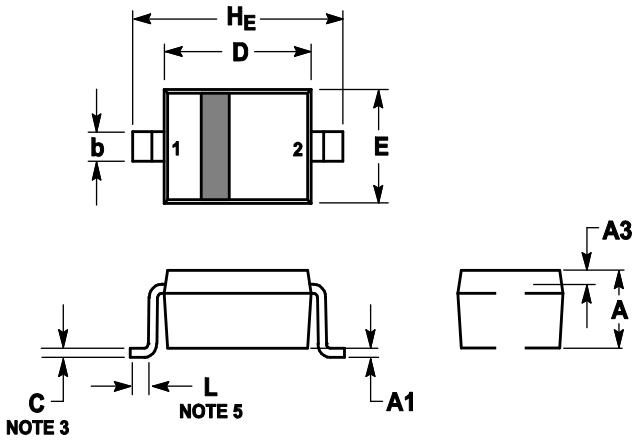
## 6. ELECTRICAL CHARACTERISTICS CURVES



## 7. OUTLINE AND DIMENSIONS

Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.8	0.9	1	0.031	0.035	0.04
A1	0	0.05	0.1	0	0.002	0.004
A3	0.15REF			0.006REF		
b	0.25	0.32	0.4	0.01	0.012	0.016
C	0.089	0.12	0.177	0.003	0.005	0.007
D	1.6	1.7	1.8	0.062	0.066	0.07
E	1.15	1.25	1.35	0.045	0.049	0.053
L	0.08			0.003		
H <sub>E</sub>	2.3	2.5	2.7	0.09	0.098	0.105

## 8. SOLDERING FOOTPRINT

