

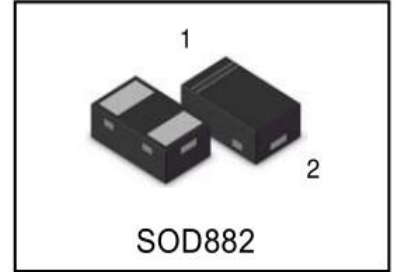
BAT54BS

S-BAT54BS

Schottky Barrier Diodes

1. FEATURES

- Extremely Fast Switching Speed
- Low Forward Voltage — 0.35 Volts (Typ) @ IF = 10 mAdc
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.
- We declare that the material of product compliance with RoHS requirements.



2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
BAT54BS	TU	5000/Tape&Reel



3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Reverse Voltage	VR	30	Vdc

4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	250 4	mW mW/°C
Thermal Resistance, Junction-to-Ambient	RθJA	400	°C/W
Junction Temperature	TJ	125	°C
Storage temperature	Tstg	-55~+150	°C

1.FR-4 Minimum Pad.

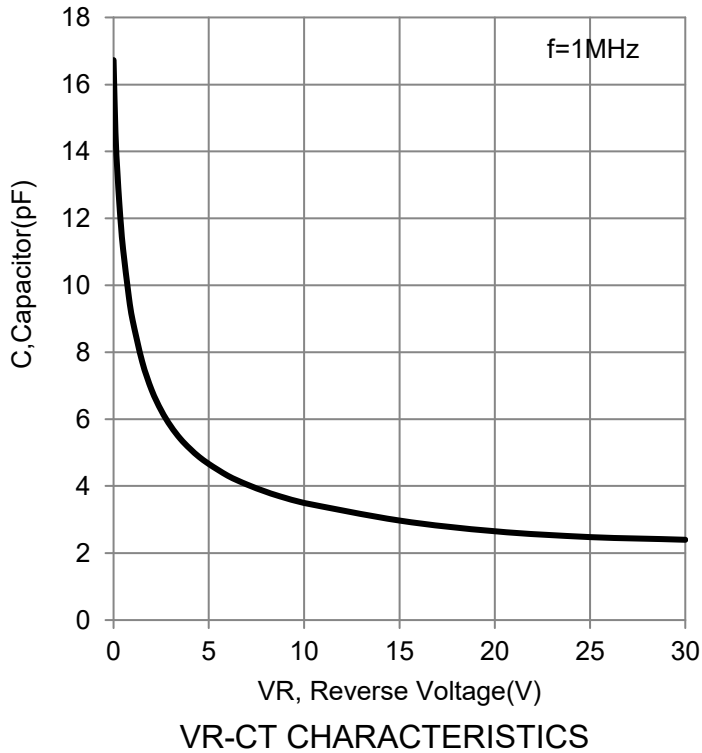
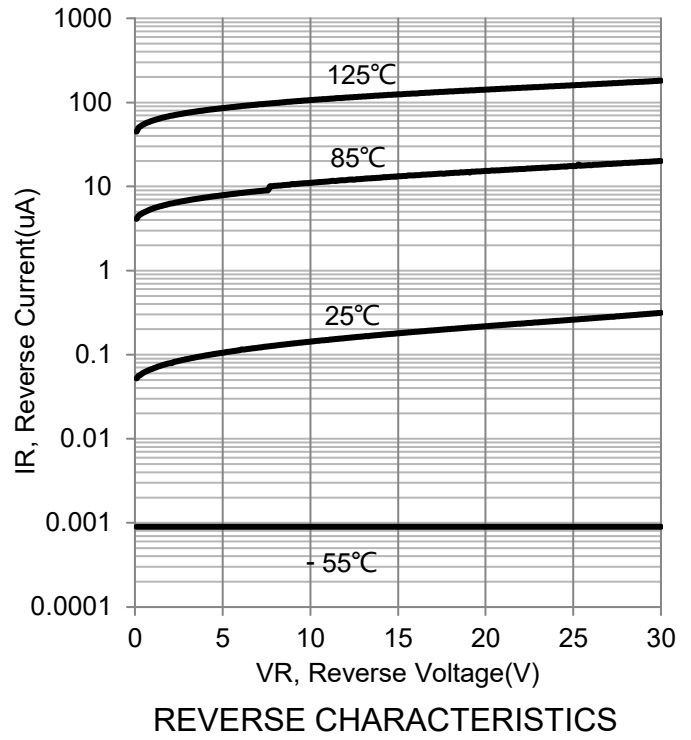
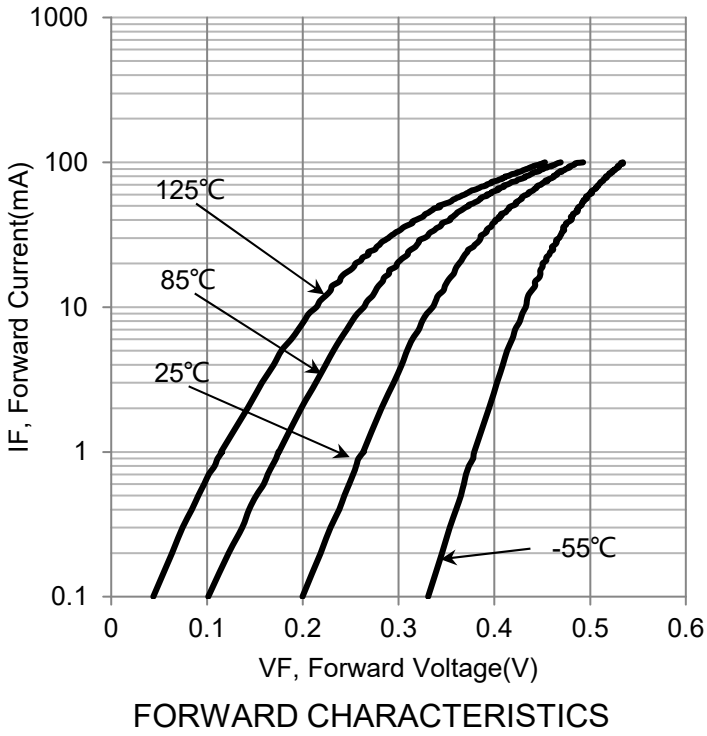


5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

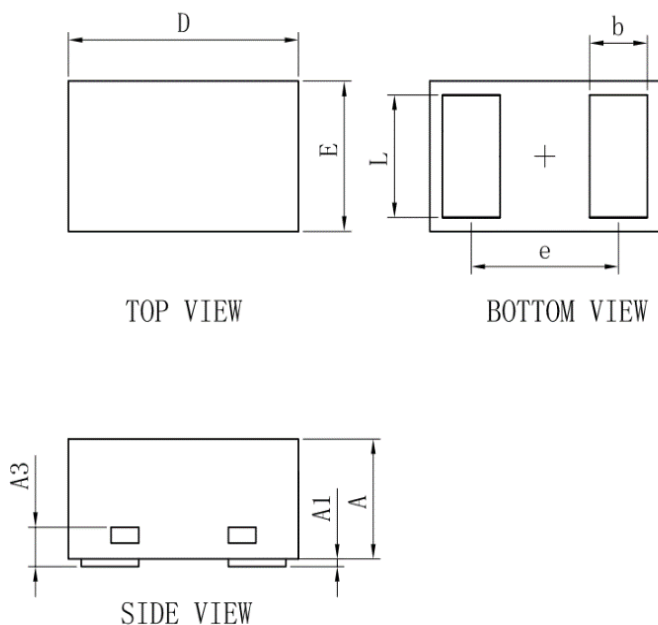
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (IR = 10 μ Adc)	VBR	30	-	-	V
Diode Capacitance (VR = 1.0V , f = 1.0 MHz)	CT	-	7.6	10	pF
Reverse Voltage Leakage Current (VR = 25Vdc)	IR	-	0.5	2	μ A
Forward Voltage (IF = 0.1 mAdc) (IF = 1 mAdc) (IF = 10 mAdc) (IF = 30 mAdc) (IF = 100 mAdc)	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 mAdc, IR(REC) = 1.0 mAdc)	trr	-	-	5	ns
Forward Current (DC)	IF			200	mA
Repetitive Peak Forward Current	IFRM	-	-	300	mA
Non–Repetitive Peak Forward Current (t < 1.0 s)	IFSM	-	-	600	mA



6. ELECTRICAL CHARACTERISTICS CURVES

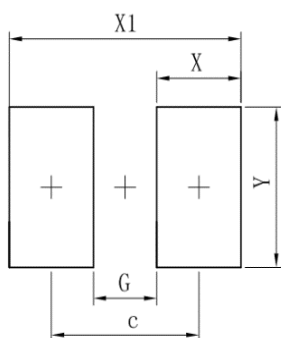


7. OUTLINE AND DIMENSIONS



SOD882			
Dim	Min	Typ.	Max
D	0.95	1.00	1.05
E	0.55	0.60	0.65
e	-	0.64	-
L	0.44	0.49	0.54
b	0.20	0.25	0.30
A	0.43	0.48	0.53
A1	0	-	0.05
A3	0.127REF.		
All Dimensions in mm			

8. SOLDERING FOOTPRINT



Dimensions	(mm)
c	0.70
G	0.30
X	0.40
X1	1.10
Y	0.70

