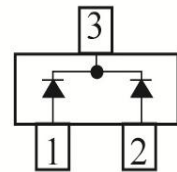
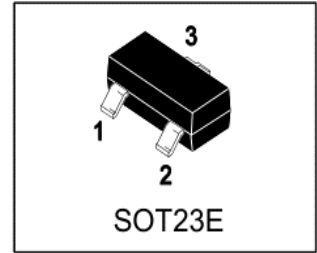


# BAT40AL

## S-BAT40AL

### 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.
- Low Forward Voltage Drop.
- Common Cathode Configuration

#### 2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
BAT40AL	40A	3000/Tape&Reel

#### 3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage	VRRM	40	V
Working Peak Reverse Voltage	VRWM	40	V
DC Blocking Voltage	VR	40	V
RMS Reverse Voltage	VR(RMS)	28	V
Average Rectified Current (Note 1)	IO	0.4	A
Non-Repetitive Peak Forward Surge Current @ t = 8.3ms	IFSM	2	A
Power Dissipation	PD	400	mW
Junction Temperature Range	Tj	-55~+125	°C
Storage Temperature Range	Tstg	-55~+150	°C

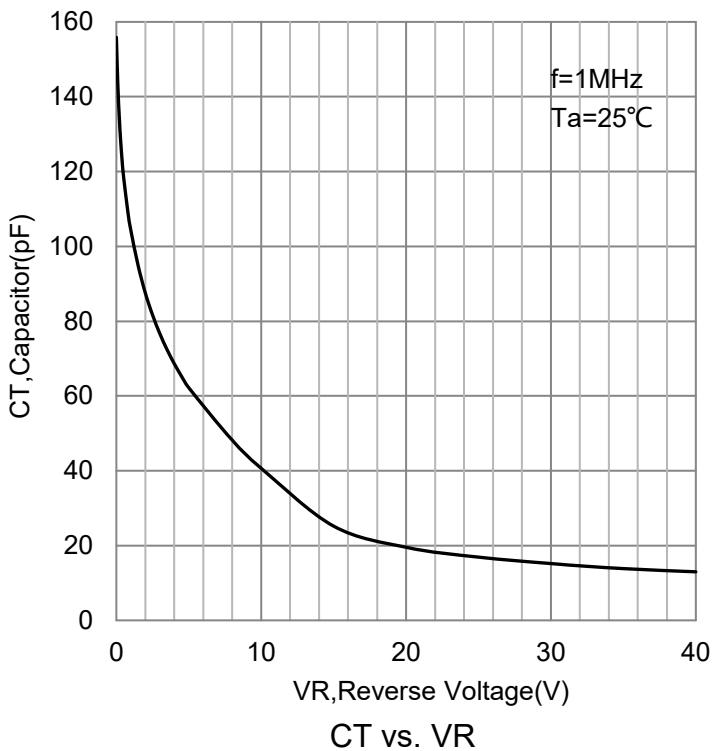
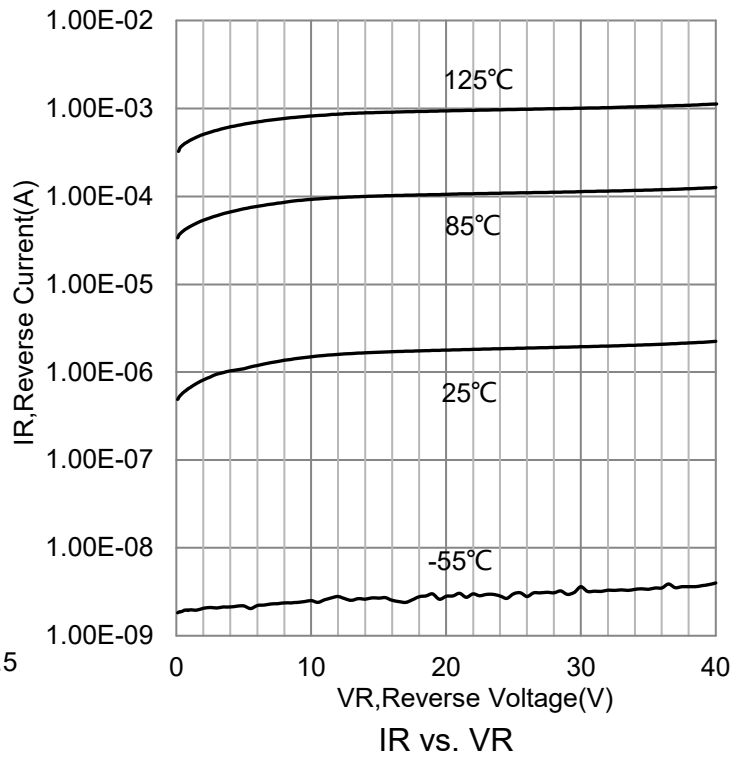
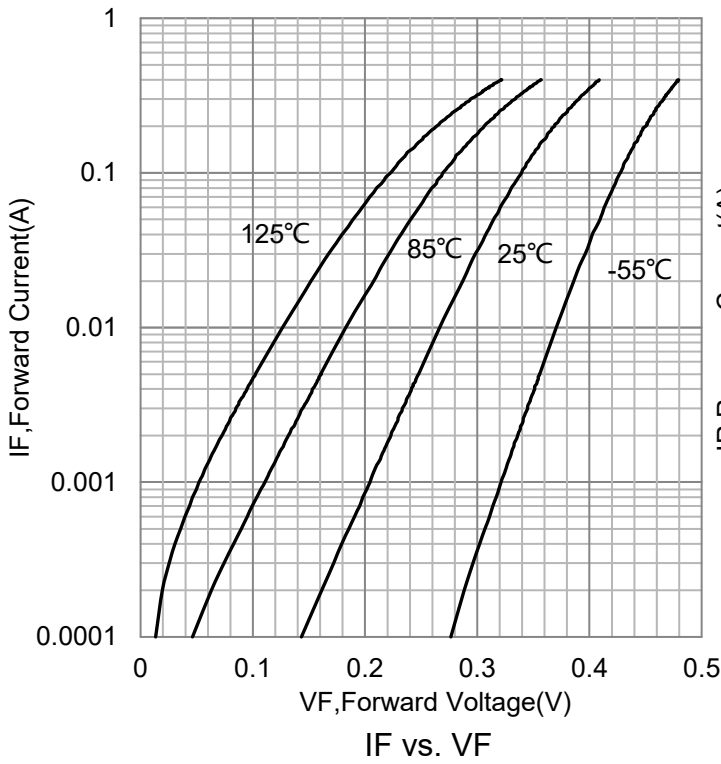
#### 4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage (Note 2) (IR = 500μA)	V(BR)R	40	-	-	V
Forward Voltage (Note 2) (IF = 10mA)	VF	-	-	300	mV
(IF = 200mA)		-	-	500	
Leakage Current (Note 2) (VR = 25V)	IR	-	-	10	μA
Junction Capacitance (VR = 0V, f = 1.0MHz)	Cj	-	156	-	pF

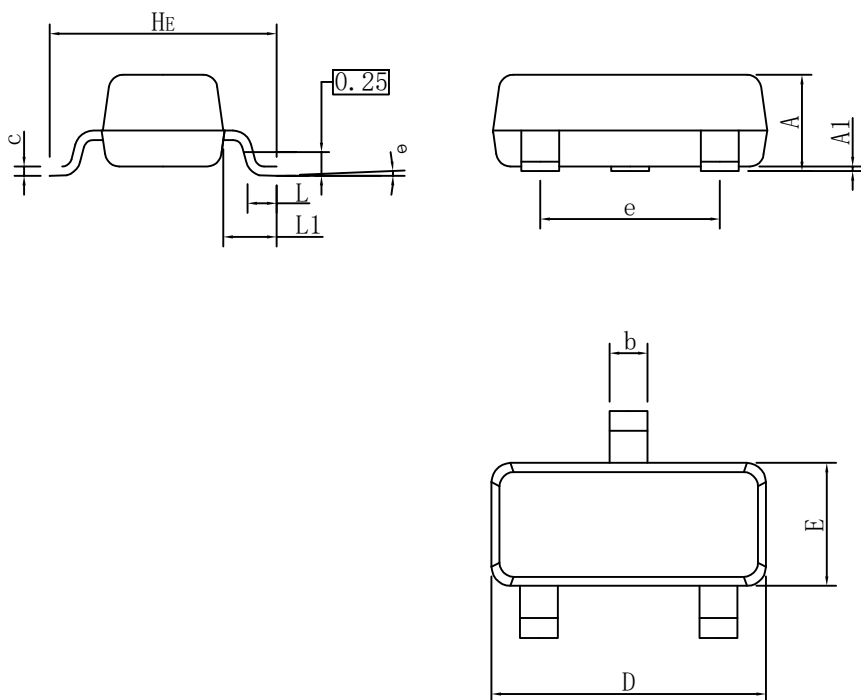
1. Mean output current per element:IO /2.
2. Short duration test pulse to minimize self-heating effect.



**5.ELECTRICAL CHARACTERISTICS CURVES**

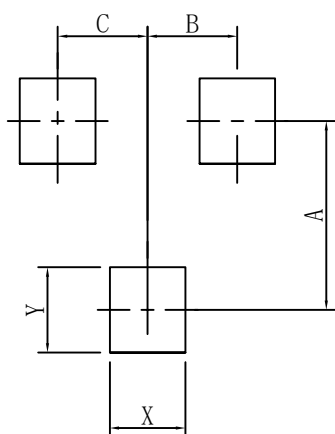


## 6. OUTLINE AND DIMENSIONS



SOT23E			
DIM	MIN	NOR	MAX
A	0.90	1.00	1.10
A1	0.01	0.06	0.10
b	0.30	0.40	0.50
c	0.10	0.17	0.20
D	2.80	2.90	3.00
E	1.20	1.30	1.40
e	1.80	1.90	2.00
L	0.20	0.40	0.60
L1	0.60REF		
HE	2.20	2.40	2.60
θ	0°	-	10°
All Dimensions in mm			

## 7. SOLDERING FOOTPRINT



SOT23E	
DIM	(mm)
X	0.80
Y	0.90
A	2.00
B	0.95
C	0.95

