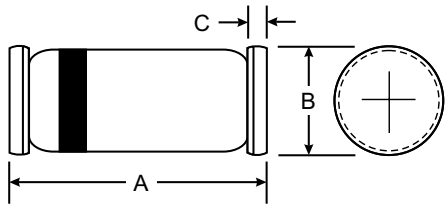
SUNMATE SEMICONDUCTORCO · LIMITED

BA604

SURFACE MOUNT FAST SWITCHING DIODE

Features

- Silicon Planar Diode



Mechanical Data

- Case: SOD-80/LL34, Glass
- Terminals: Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.05 grams (approx.)

RoHS COMPLIANT

LL34/ SOD-80		
Dim	**Min**	**Max**
A	3.30	3.70
B	1.30	1.60
C	0.28	0.50
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Peak reverse voltage, non repetitive		V_{RSM}	80	V
Reverse voltage		V_R	50	V
Peak forward surge current	t_p = 1 µs	I_{FSM}	2	A
Repetitive peak forward current		I_{FRM}	450	mA
Forward continuous current		I_F	200	mA
Power dissipation		P_V	500	mW

Thermal Characteristics @ T_A = 25°C unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Thermal resistance junction to ambient air	on PC board 50 mm x 50 mm x 1.6 mm	R_{thJA}	500	K/W
Junction lead	T_L = constant	R_{thJL}	350	K/W
Junction temperature		T_j	175	°C
Storage temperature range		T_{stg}	- 55 to + 175	°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Parameter	Test condition	Symbol	Min	Typ.	Max	Unit
Forward voltage	I_F = 50 mA	V_F			1100	mV
Reverse current	V_R = 50 V	I_R			1	µA
	V_R = 20 V	I_R			50	nA
	V_R = 20 V, T_j = 150 °C	I_R			50	µA
Breakdown voltage	I_R = 100 µA	$V_{(BR)}$	80			V
Reverse recovery time	I_F = 10 mA, I_R = 10 mA, i_R = 1 mA	t_{rr}			20	ns
Diode capacitance	V_R = 0, f = 1 MHz	C_D			4	pF