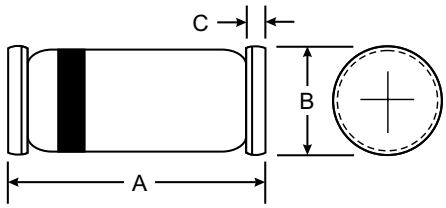
BAS86

SURFACE MOUNT SMALL SIGNAL SCHOTTKY DIODE

VOLTAGE RANGE: 50V
CURRENT: 0.2A

Features

- Integrated protection ring against static discharge
- Very low forward voltage



Mechanical Data

- Case: LL34 (SOD-80)
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: MiniMELF 0.05 grams

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 Conditions	Type	Symbol	Value	Unit
Reverse voltage			V_R	50	V
Peak forward surge current	t_p=10 ms		I_{FSM}	5	A
Repetitive peak forward current	$t_p \leq 1$s		I_{FRM}	500	mA
Forward current			I_F	200	mA
Average forward current			I_{FAV}	200	mA
Junction temperature			T_j	125	°C
Storage temperature range			T_{stg}	–65...+150	°C

Maximum Thermal Resistance T_j = 25°C

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	on PC board 50mmx50mmx1.6mm	R_{thJA}	320	K/W

Electrical Characteristics T_j = 25 °C

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F=0.1mA		V_F			300	mV
	I_F=1mA		V_F			380	mV
	I_F=10mA		V_F			450	mV
	I_F=30mA		V_F			600	mV
	I_F=100mA		V_F			900	mV
Reverse current	V_R=40V		I_R			5	μA
Diode capacitance	V_R=1V, f=1MHz		C_D			8	pF

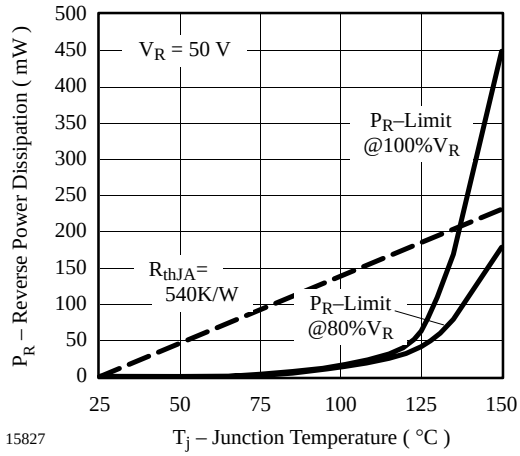


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

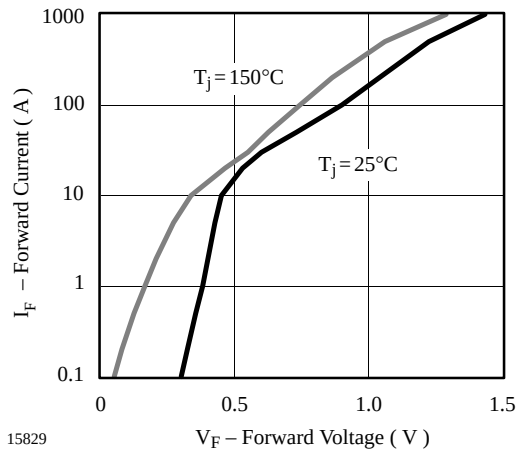


Figure 3. Forward Current vs. Forward Voltage

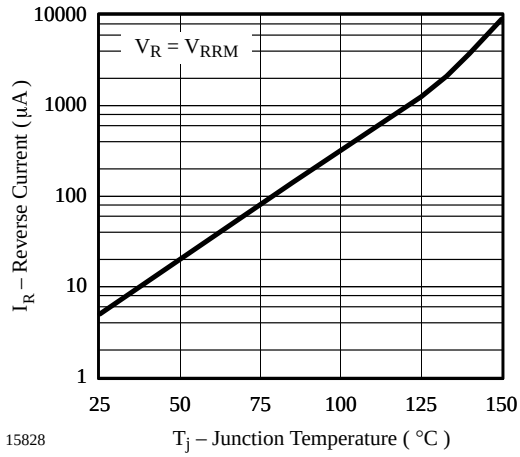


Figure 2. Reverse Current vs. Junction Temperature

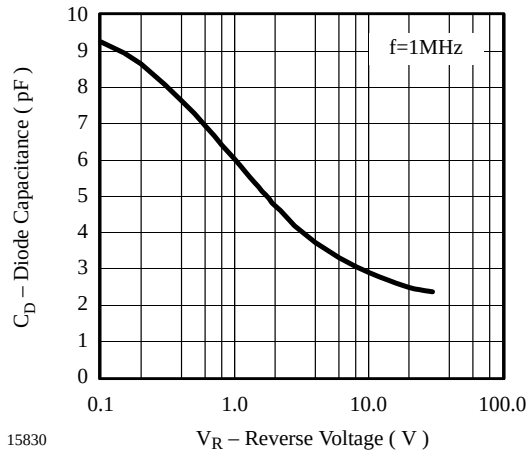


Figure 4. Diode Capacitance vs. Reverse Voltage