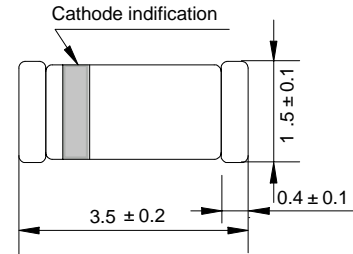


Features

- Integrated protection ring against static discharge
- Low capacitance
- Low leakage current
- Low forward voltage drop
- Very low switching time
- Lead (Pb)-free component

BAS81-BAS83



LL-34(SOD-80) Dimensions in millimeters

Mechanical Data

- **Case:** SOD-80 Glass case
- **Weight:** approx. 31 mg
- **Cathode Band Color:** Black

Maximum Ratings and Electrical Characteristics @ T_A = 25°C unless otherwise specified

Parameter	Test condition	Part	Symbol	Value	Unit
Reverse voltage		BAS81	V _R	40	V
		BAS82	V _R	50	V
		BAS83	V _R	60	V
Peak forward surge current	t _p = 1 s		I _{FSM}	500	mA
Repetitive peak forward current			I _{FRM}	150	mA
Forward continuous current			I _F	30	mA

Parameter	Test condition	Symbol	Min	Typ.	Max	Unit
Forward voltage	I _F = 0.1 mA	V _F			330	mV
	I _F = 1 mA	V _F			410	mV
	I _F = 15 mA	V _F			1000	mV
Reverse current	V _R = V _{Rmax}	I _R			200	nA
Diode capacitance	V _R = 1 V, f = 1 MHz	C _D			1.6	pF

BAS81-BAS83

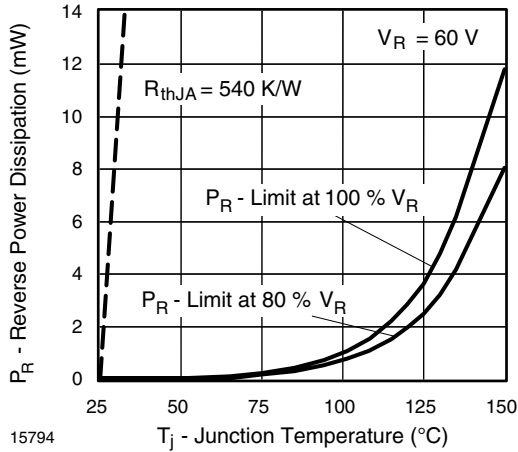


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

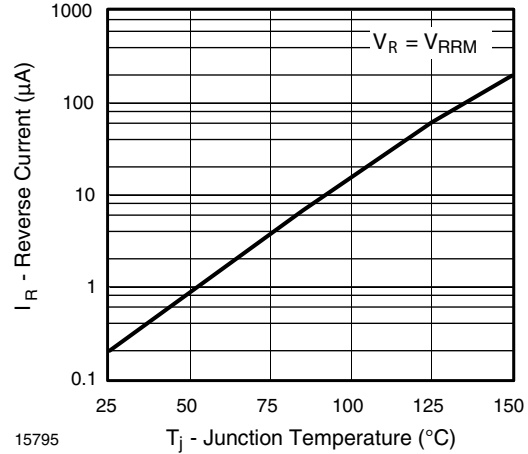


Figure 2. Reverse Current vs. Junction Temperature

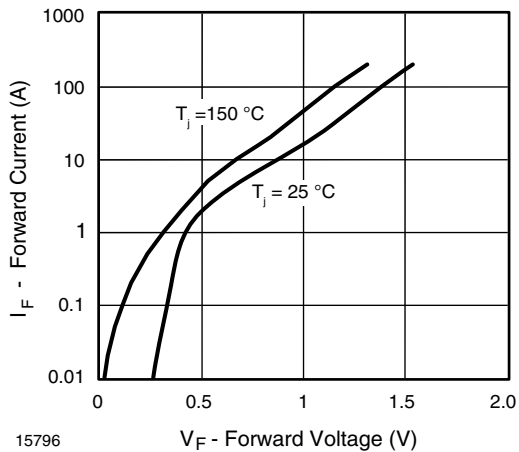


Figure 3. Forward Current vs. Forward Voltage

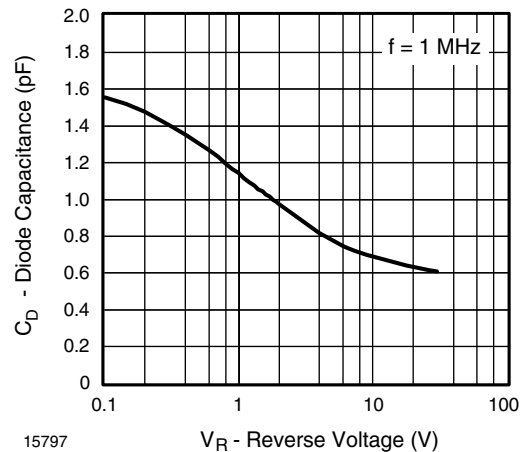


Figure 4. Diode Capacitance vs. Reverse Voltage