

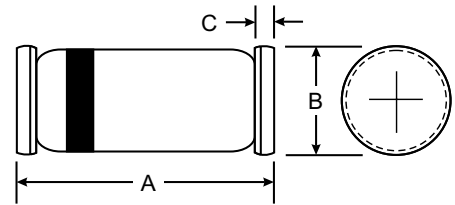


### Features

- Integrated protection ring against static discharge
- Low capacitance
- Low leakage current
- Low forward voltage drop
- Very low switching time

### Mechanical Data

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



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 @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Test Conditions	Type	Symbol	Value	Unit
Reverse voltage		BAS81	$V_R$	40	V
		BAS82	$V_R$	50	V
		BAS83	$V_R$	60	V
Peak forward surge current	$t_p=1\text{s}$		$I_{FSM}$	500	mA
Repetitive peak forward current			$I_{FRM}$	150	mA
Forward current			$I_F$	30	mA
Junction temperature			$T_j$	125	$^\circ\text{C}$
Storage temperature range			$T_{stg}$	-65...+150	$^\circ\text{C}$

Maximum Thermal Resistance  $T_j = 25^\circ\text{C}$

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

Electrical Characteristics  $T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=0.1\text{mA}$		$V_F$			330	mV
	$I_F=1\text{mA}$		$V_F$			410	mV
	$I_F=15\text{mA}$		$V_F$			1	V
Reverse current	$V_R=V_{Rmax}$		$I_R$			200	nA
Diode capacitance	$V_R=1\text{V}, f=1\text{MHz}$		$C_D$			1.6	pF

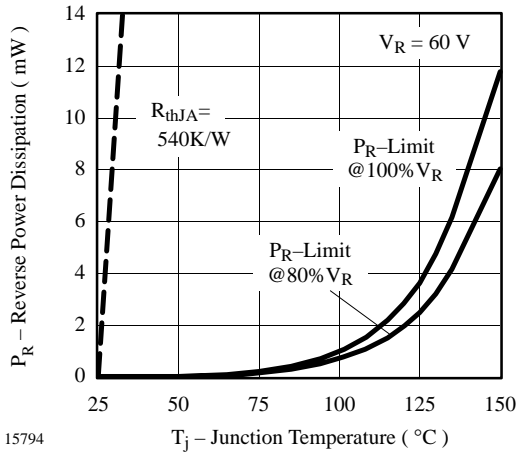


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

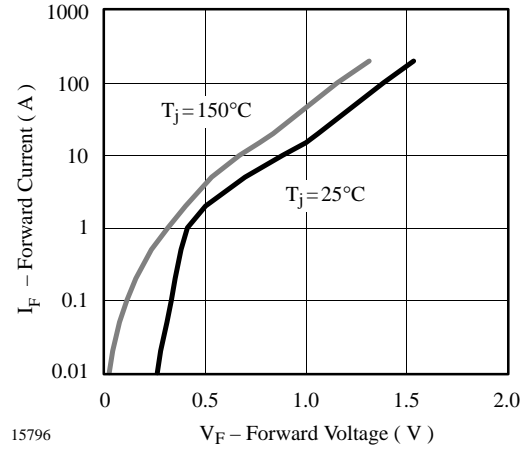


Figure 3. Forward Current vs. Forward Voltage

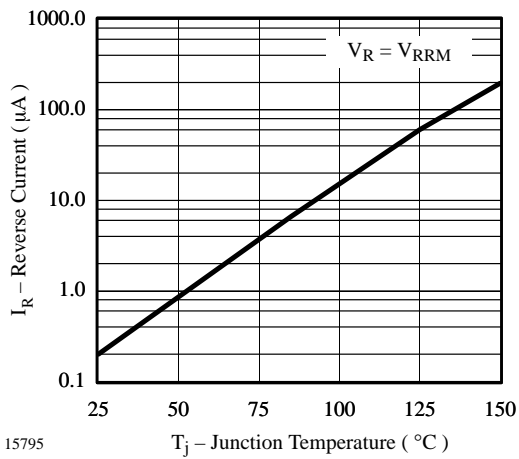


Figure 2. Reverse Current vs. Junction Temperature

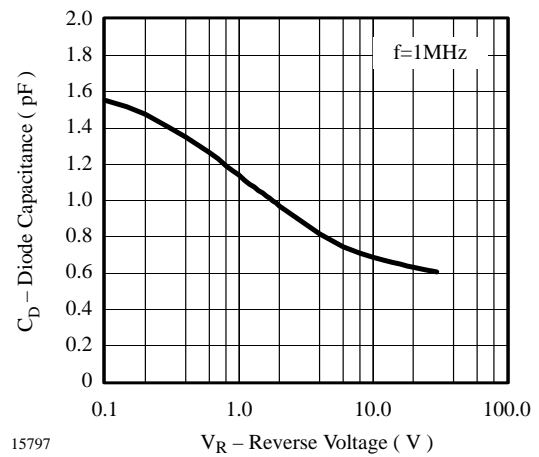


Figure 4. Diode Capacitance vs. Reverse Voltage