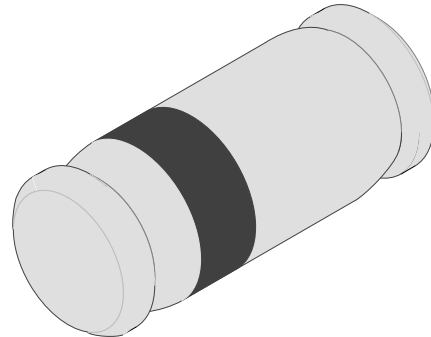


## Schottky Barrier Diode

### Features

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



### Applications

Applications where a very low forward voltage is required

### Absolute Maximum Ratings

Parameter	Test Conditions	Type	Symbol	Value	Unit
Reverse voltage			$V_R$	50	V
Peak forward surge current	$t_p=10\text{ ms}$		$I_{FSM}$	5	A
Repetitive peak forward current	$t_p \leq 1\text{ s}$		$I_{FRM}$	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

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

### Electrical Characteristics

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

## Characteristics ( $T_j = 25^\circ\text{C}$ unless otherwise specified)

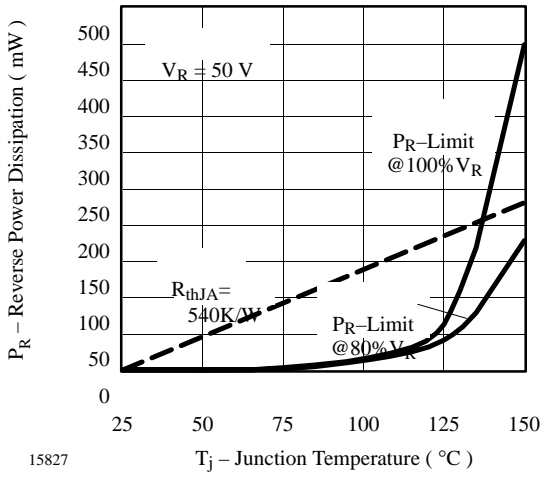


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

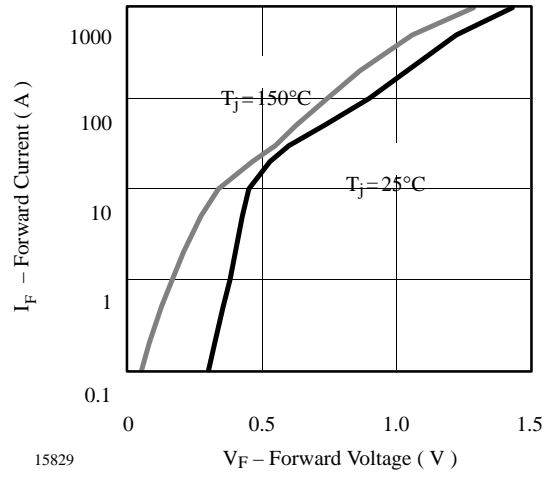


Figure 3. Forward Current vs. Forward Voltage

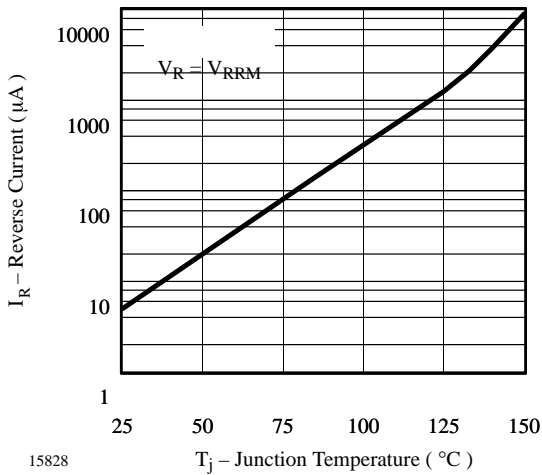


Figure 2. Reverse Current vs. Junction Temperature

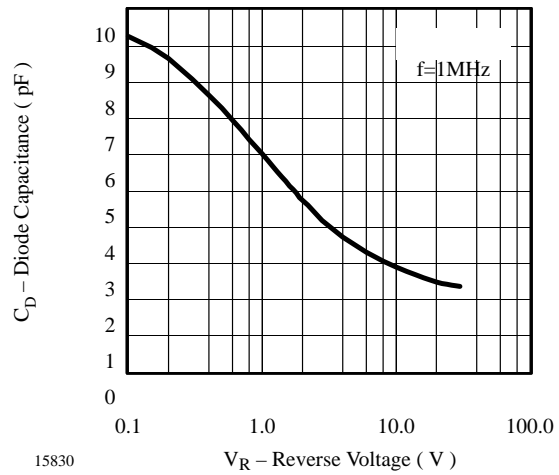
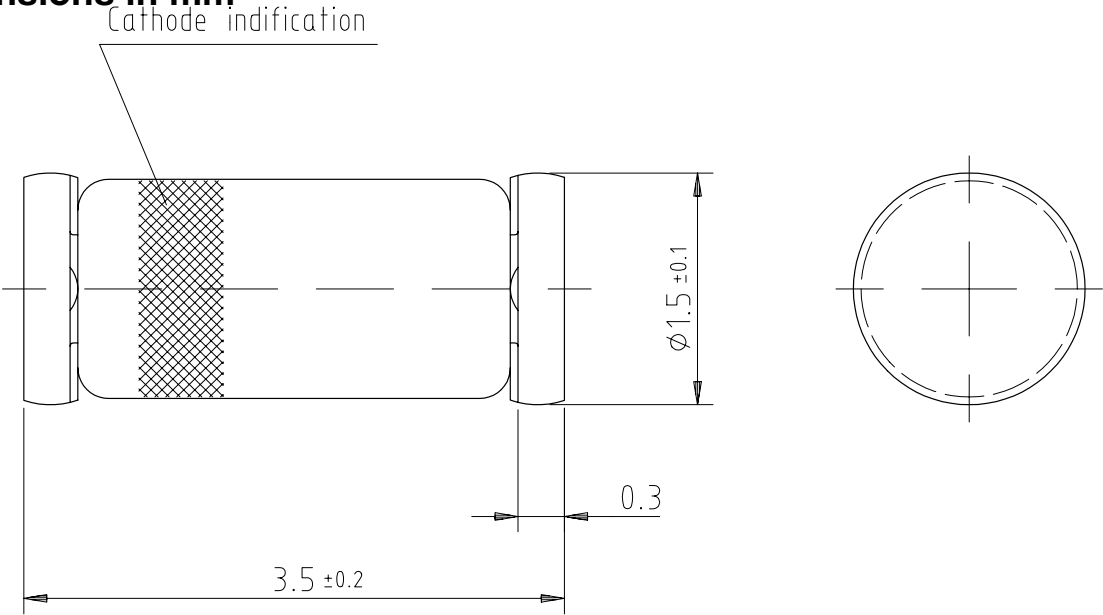


Figure 4. Diode Capacitance vs. Reverse Voltage

# BAS86

## Dimensions in mm



Glass case  
Mini MELF / SOD 80  
JEDEC DO 213 AA

technical drawings  
according to DIN  
specifications

96 12070