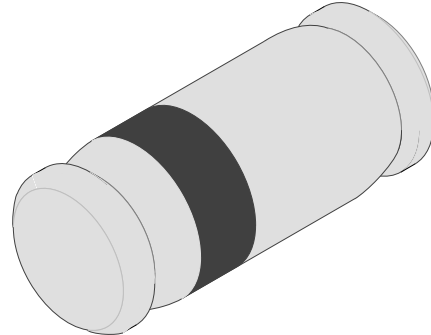


Schottky Barrier Diode

Features

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



Applications

Applications where a very low forward voltage is required

Absolute Maximum Ratings

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

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	$^\circ\text{C}$
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			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)

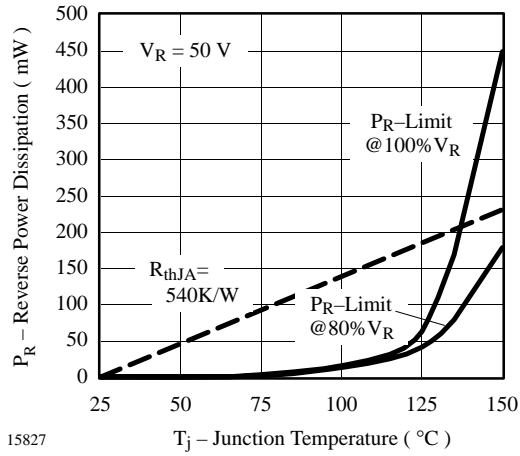


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

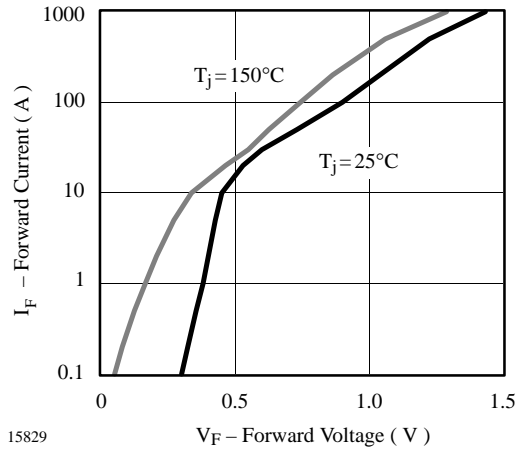


Figure 3. Forward Current vs. Forward Voltage

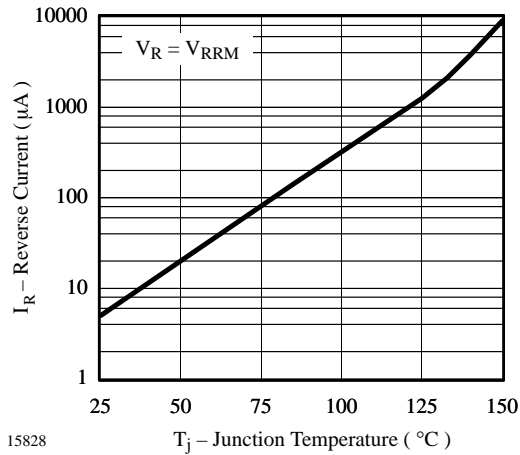


Figure 2. Reverse Current vs. Junction Temperature

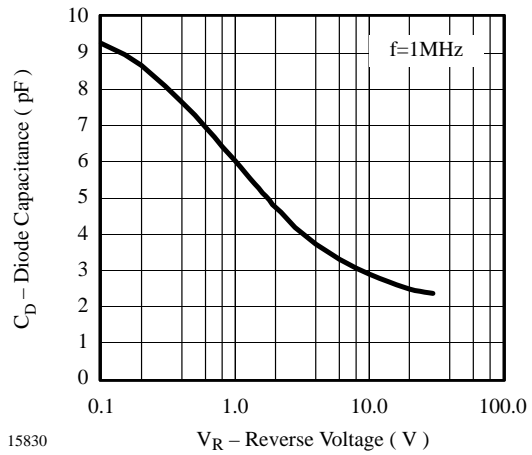
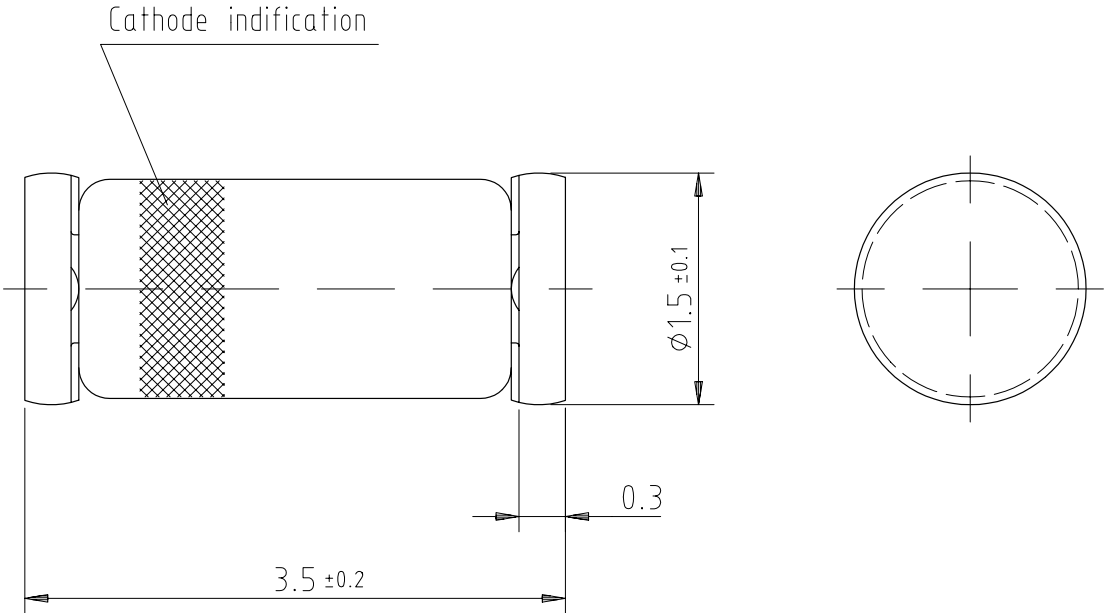


Figure 4. Diode Capacitance vs. Reverse Voltage

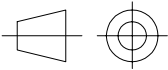
BAS86

Dimensions in mm



Glass case
Mini MELF / SOD 80
JEDEC DO 213 AA

96 12070


technical drawings
according to DIN
specifications