Schottky Barrier Diode

Features

1. High reliability
2. Saving space
3. Very low forward voltage
4. Micro Melf package, fits onto SOD 323/SOT 23 footprints

Applications

Applications where a very low forward voltage is required

Absolute Maximum Ratings

T_j=25℃

Parameter	Test Conditions	Symbol	Value	Unit
Continuous reverse voltage		V_R	30	V
Forward continuous current	T_{amb}=25℃	I_F	200	mA
Peak forward current	T_{amb}=25℃	I_{FM}	300	mA
Surge forward current	t_p≦1 s, T_{amb}=25℃	I_{FSM}	600	mA
Power dissipation	T_{amb}=65℃	P_{tot}	200	mW
Maximum junction temperature		T_j	125	℃
Ambient operating temperature range		T_A	-65~+125	℃
Storage temperature range		T_{stg}	-65~+150	℃

Maximum Thermal Resistance

T_j=25℃

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	on PC board 50mm×50mm×1.6mm	R_{thJA}	250	K/W

Electrical Characteristics

T_j=25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)R}$	I_R=10μA (pulsed)	30	-	-	V
Leakage current	I_R	V_R=25V	-	-	2	μA
Forward voltage Pulse test tp<300μs, δ<2%	V_F	I_F=0.1mA	-	-	0.24	V
		I_F=1mA	-	-	0.32	V
		I_F=10mA	-	-	0.4	V
		I_F=30mA	-	0.5	-	V
		I_F=100mA	-	-	0.8	V
Capacitance	C_{tot}	V_R=1V, f=1MHz	-	-	10	pF
Reverse recovery time	t_{rr}	I_F=10mA to I_R=10mA to I_R =0.1mA I_R	-	-	5	ns

Characteristics (T_j=25℃ unless otherwise specified)

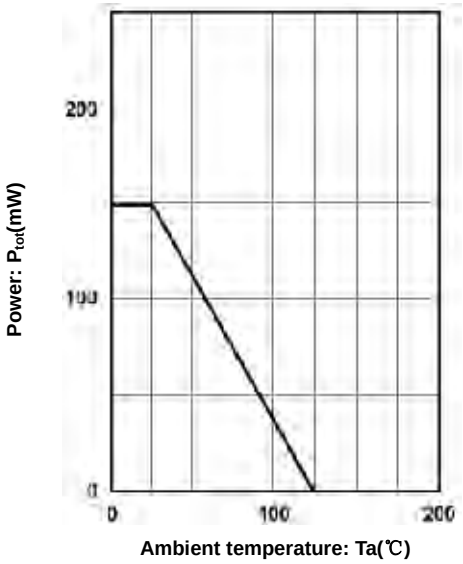


Figure 1. Admissible power dissipation vs. ambient temperature

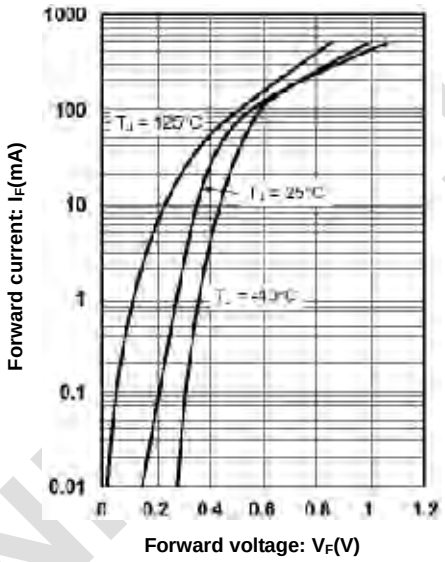


Figure 2. Typical instantaneous forward characteristics

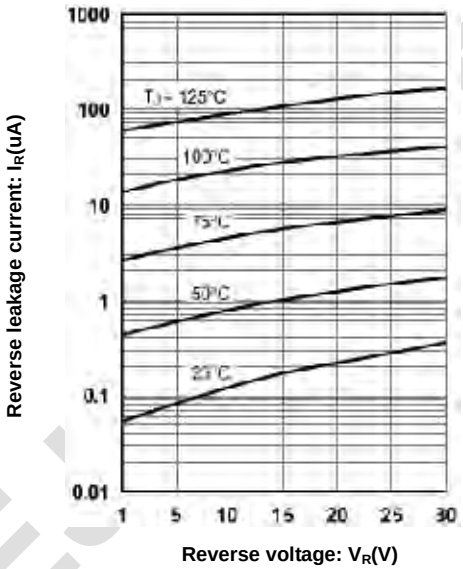


Figure 3. Typical reverse characteristics

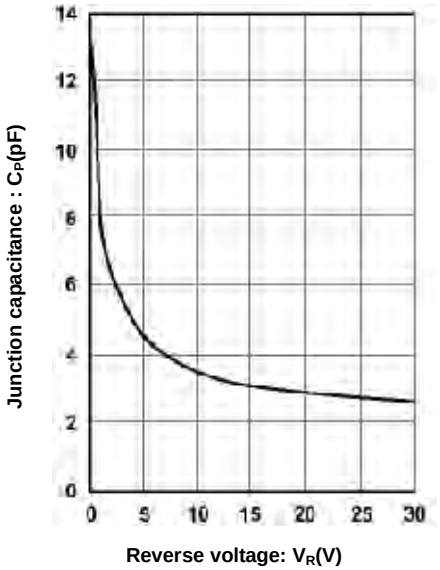
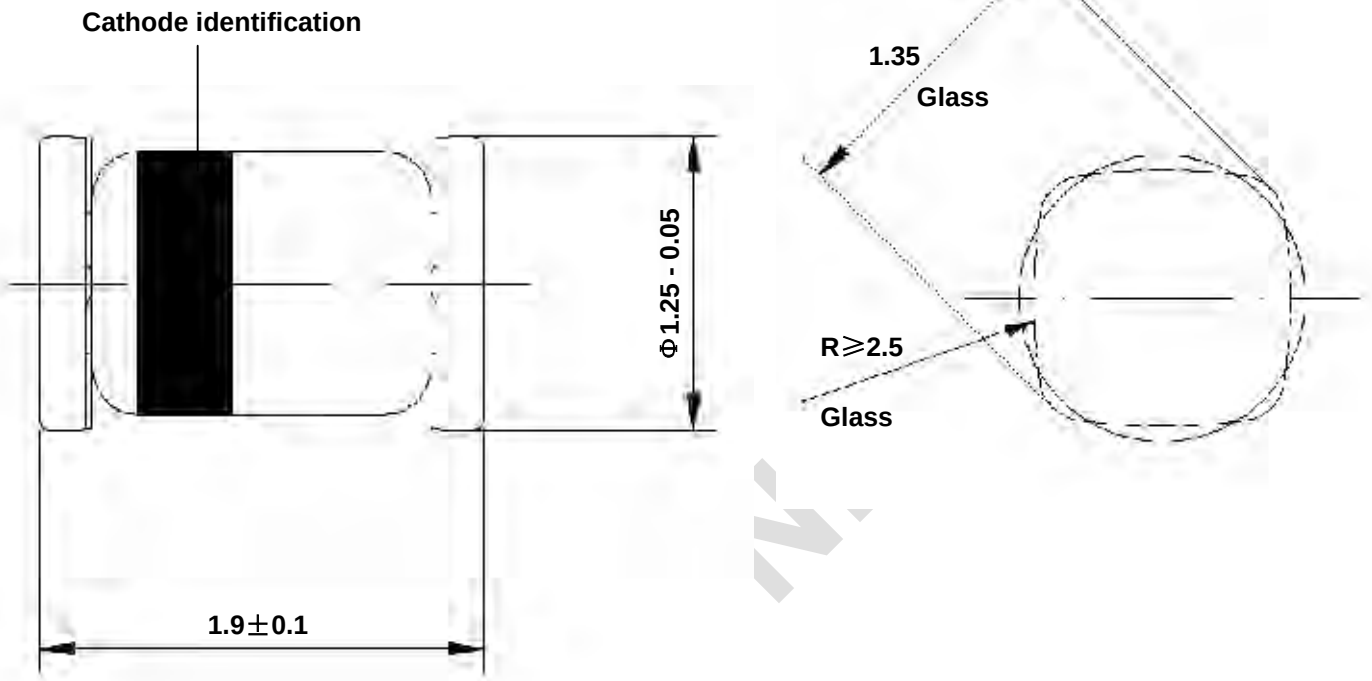


Figure 4. Typical junction capacitance

Dimensions in mm



Glass Case
Micro Melf