

High-speed switching diode

Features

1. Small surface mounting type
2. High reliability
3. High speed (t_{rr} = 4 ns)



Applications

Extreme fast switches

Construction

Silicon epitaxial planar

Absolute Maximum Ratings

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

Parameter	Test Conditions	Symbol	Value	Unit
Repetitive peak reverse voltage		V_{RRM}	75	V
DC blocking voltage		V_R	75	V
Non repetitive peak forward surge current	$t=1\text{s}$	I_{FSM}	1	A
	$t=1\mu\text{s}$	I_{FSM}	4	mA
Forward current		I_F	300	mA
Average rectified current	Half wave rectification with resistive load and $f>50\text{ MHz}$	I_{FAV}	200	mA
Power dissipation		P_V	500	mW
Junction temperature		T_j	175	?
Storage temperature range		T_{stg}	-65~+175	?

Maximum Thermal Resistance

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

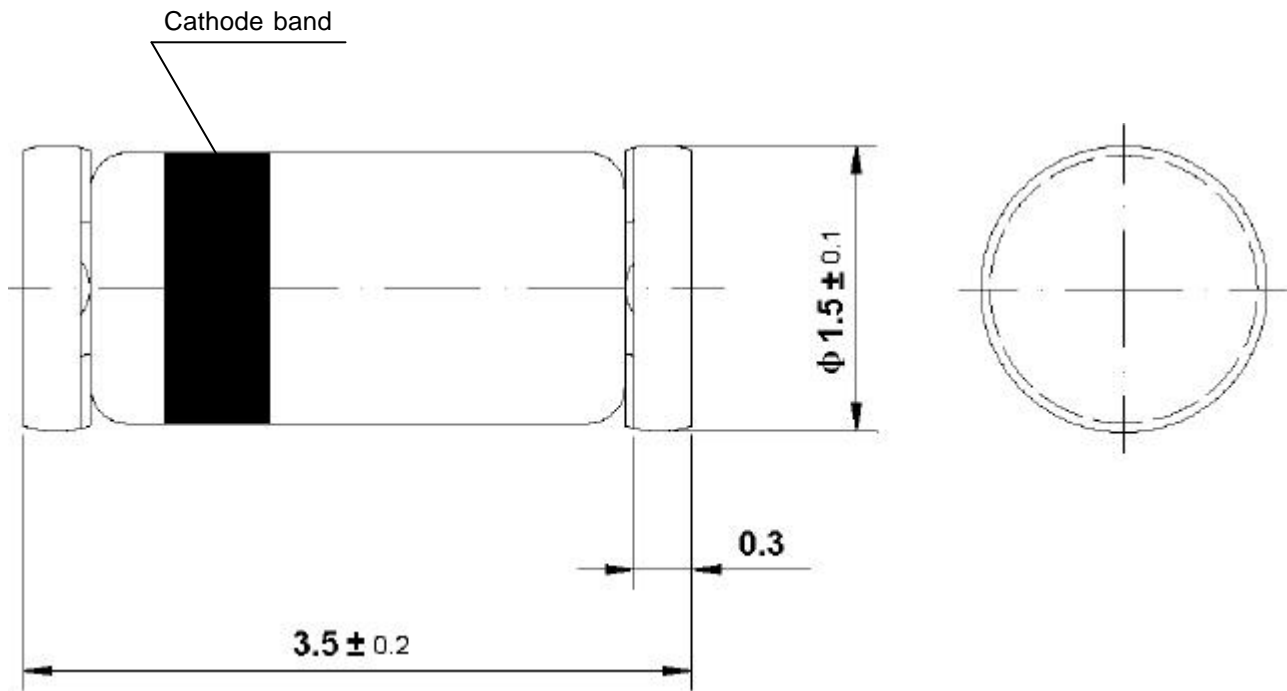
Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	on PC board 50mm× 50mm× 1.6mm	R_{thJA}	500	K/W

Electrical Characteristics

T_j=25?

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I _F =10mA	V _F			1	V
Breakdown voltage	I _R =100μ A	V _R	100			V
Peak reverse current	V _R =75V	I _R			5	μ A
	V _R =20V, T _j =150?	I _R			50	μ A
	V _R =20V	I _R			25	nA
Diode capacitance	V _R =0, f=1MHz	C _D			4	pF
Reverse recovery time	I _F =10mA, V _R =6V, i _R =0.1× I _R , R _L =1000	t _{rr}			4	ns

Dimensions in mm



Glass Case
 Mini Melf / SOD 80
 JEDEC DO 213 AA