

High-speed switching diode

Features

1. Glass sealed envelope.
2. High reliability.
3. High speed.

Applications

High speed switching

Construction

Silicon epitaxial planar



Absolute Maximum Ratings

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

Parameter	Symbol	Limits	Unit	Parameter	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	90	V	Surge current(1s)	I_{surge}	600	mA
DC reverse voltage	V_R	80	V	Power dissipation	P	300	mW
Peak forward current	I_{FM}	400	mA	Junction temperature	T_j	175	$^{\circ}\text{C}$
Mean rectifying current	I_o	130	mA	Storage temperature	T_{stg}	-65~+175	$^{\circ}\text{C}$

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.

Electrical Characteristics

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	0.92	1.2	V	$I_F=100\text{mA}$
Reverse current	I_R	-	0.02	0.5	μA	$V_R=80\text{V}$
Capacitance between terminals	C_T	-	1.55	2	pF	$V_R=0.5\text{V}, f=1\text{MHz}$
Reverse recovery time	t_{rr}	-	1.5	4	ns	$V_R=6\text{V}, I_F=10\text{mA}, R_L=50\Omega$

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

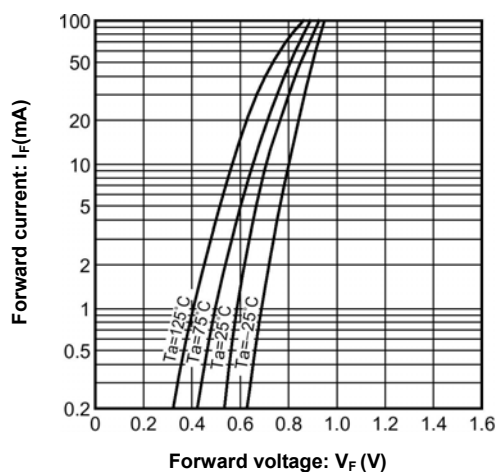


Figure 1. Forward characteristics

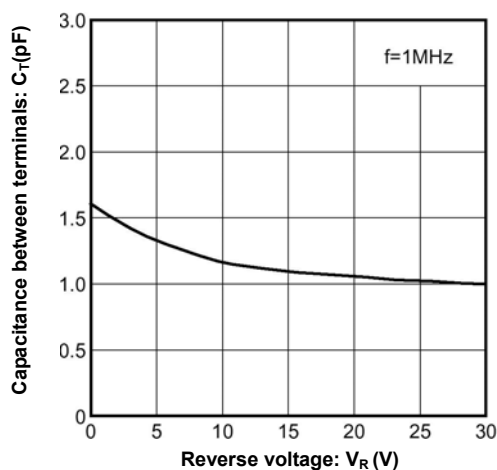


Figure 3. Capacitance between terminals characteristics

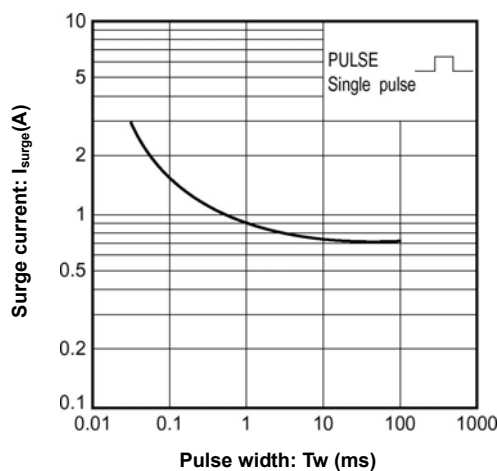


Figure 5. Surge current characteristics

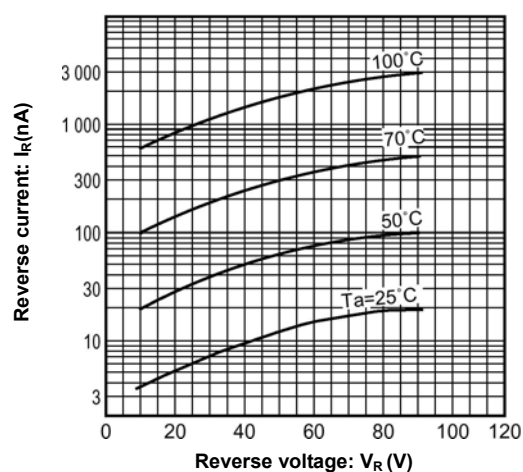


Figure 2. Reverse characteristics

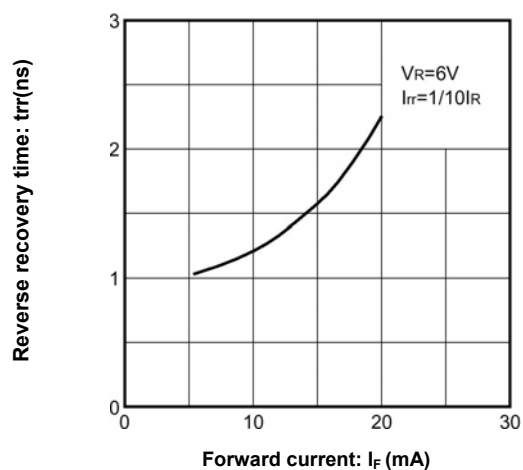


Figure 4. Reverse recovery time characteristics

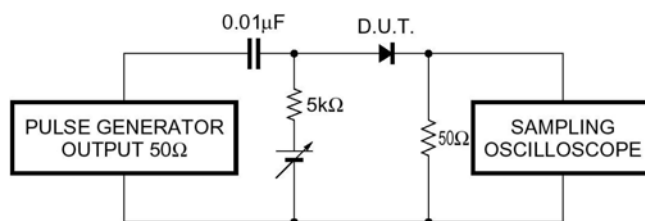
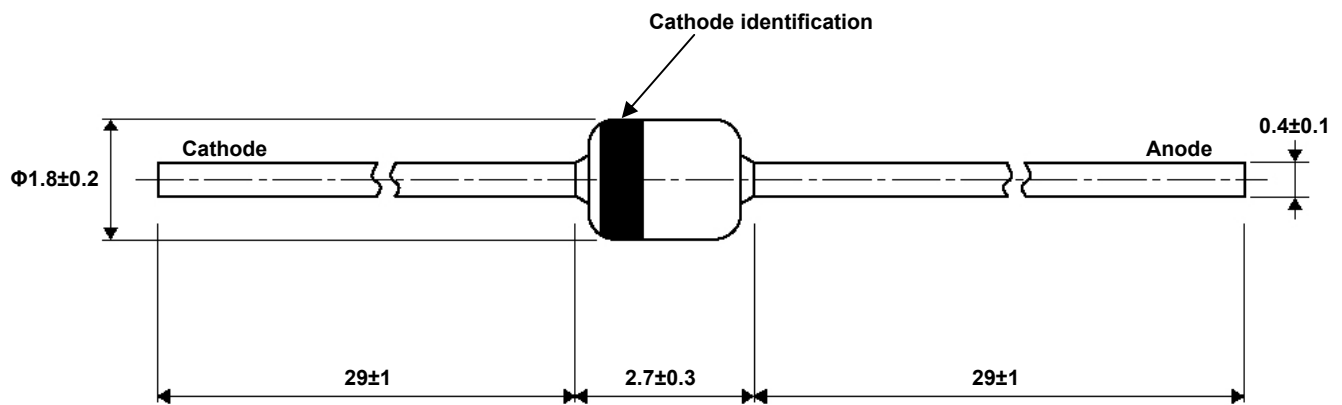


Figure 6. Reverse recovery time (t_{rr}) measurement circuit

Dimensions in mm

Standard Glass Case
JEDEC DO-34