

High-voltage switching diode

Features

1. Small surface mounting type
2. High reliability
3. $V_{RM}=250V$

Applications

High voltage switch and general purpose rectification

Construction

Silicon epitaxial planar

Absolute Maximum Ratings

$T_j=25^{\circ}C$

Parameter	Test Conditions	Type	Symbol	Value	Unit
Peak reverse voltage			V_{RM}	250	V
DC reverse voltage			V_R	220	V
Surge current	$t_p=1s$		I_{Surge}	1	A
Mean rectifying current			I_O	200	mA
Peak forward current			I_{FM}	625	mA
Power dissipation			P	300	mW
Junction temperature			T_j	175	$^{\circ}C$
Storage temperature range			T_{stg}	-65~+175	$^{\circ}C$

Maximum Thermal Resistance

$T_j=25^{\circ}C$

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

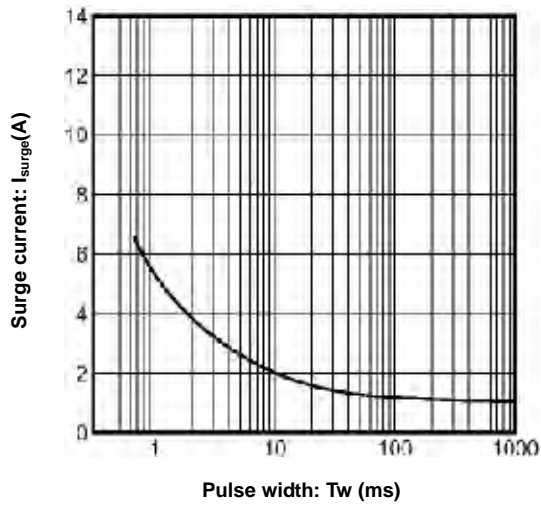


Figure 5. Surge current characteristics

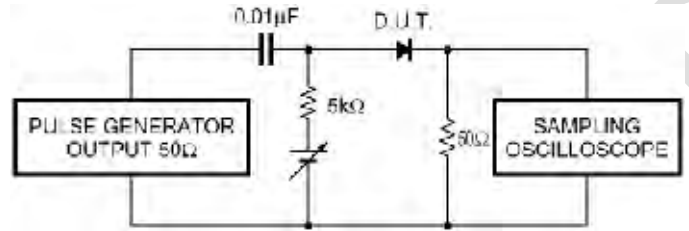
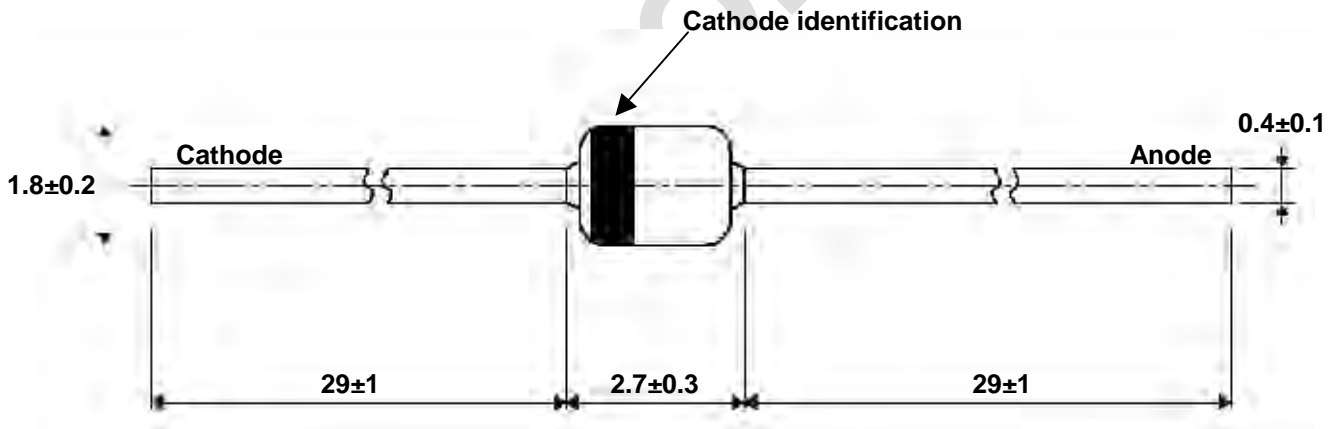


Figure 6. Reverse recovery time (trr) measurement circuit

Dimensions in mm



Standard Glass Case
JEDEC DO 34

Electrical Characteristics

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

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=200\text{mA}$		V_F		1.13	1.5	V
Reverse current	$V_R=220\text{V}$		I_R		0.05	10	μA
Diode capacitance	$V_R=0, f=1\text{MHz}$		C_D			3	pF
Reverse recovery time	$I_F=I_R=20\text{mA}, R_L=50\ \Omega$		t_{rr}			75	ns

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

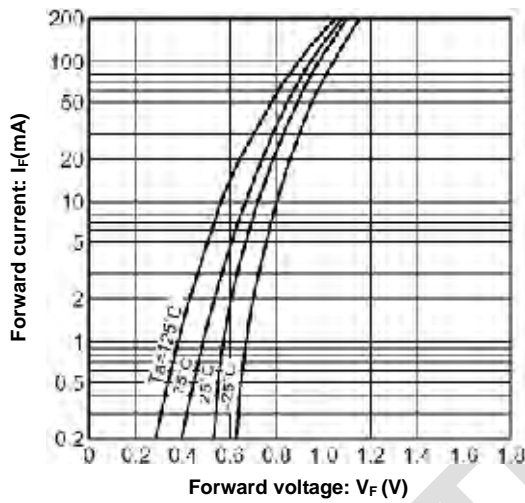


Figure 1. Forward characteristics

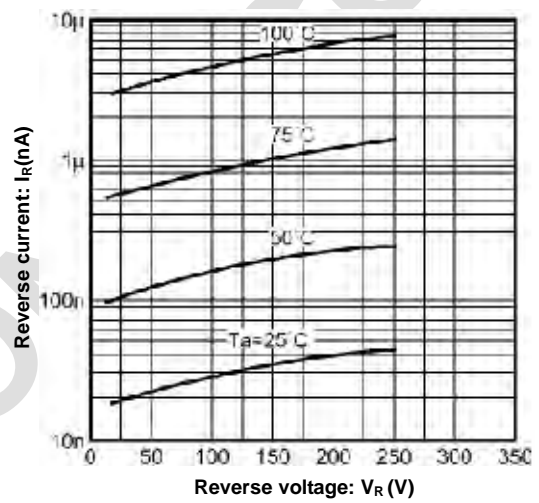


Figure 2. Reverse characteristics

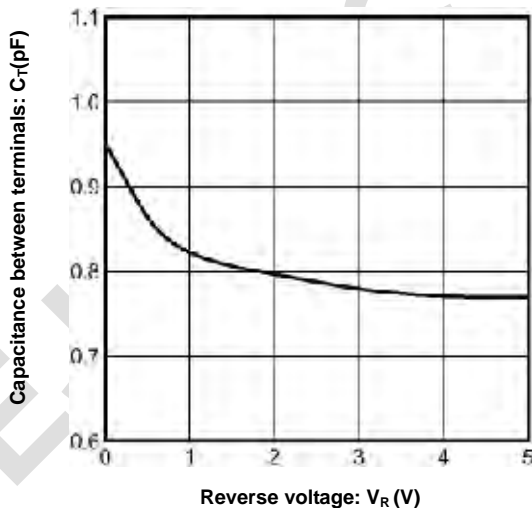


Figure 3. Capacitance between terminals characteristics

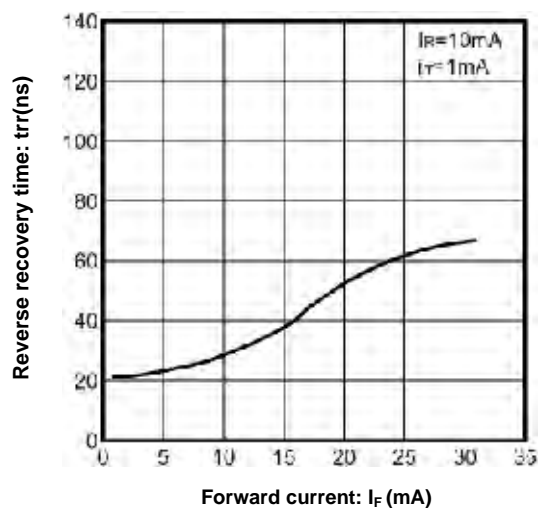


Figure 4. Reverse recovery time characteristics