



DS446

Silicon Epitaxial Planar Type
Temperature Compensation Use

Very High-Speed Switching Diode

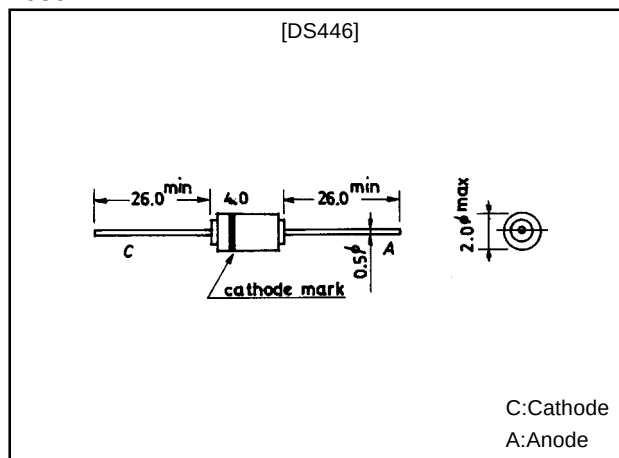
Features

- Glass sleeve structure.
- Power dissipation : $P=300\text{mW}$ max.
- Interterminal Capacitance : $C=3.0\text{pF}$ max.
- Reverse recovery time : $t_{rr}=4.0\text{ns}$ max.

Package Dimensions

unit:mm

1080



Specifications

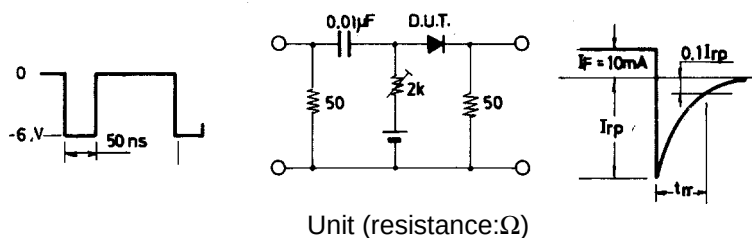
Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$

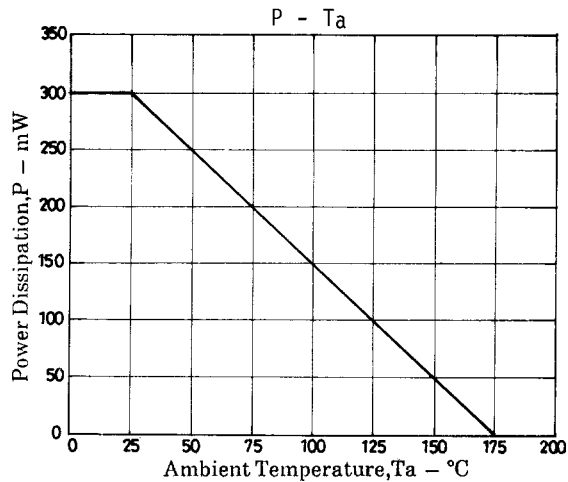
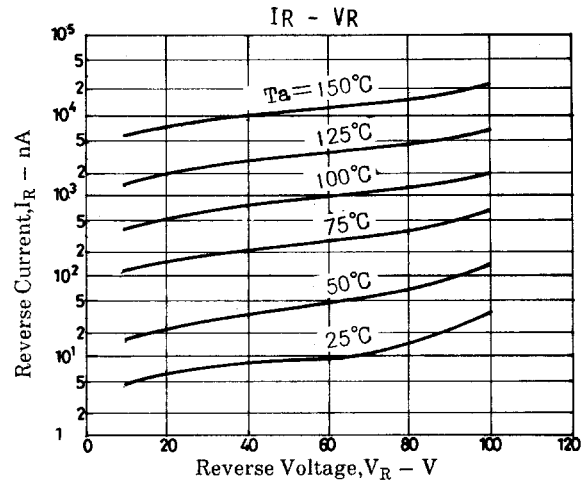
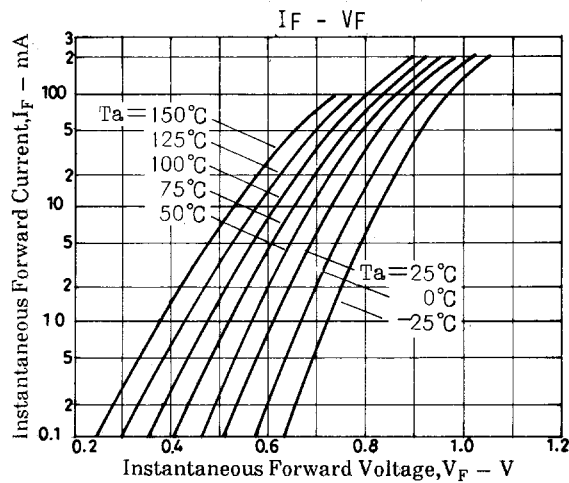
Parameter	Symbol	Conditions	Ratings	Unit
Peak Reverse Voltage	V_{RM}		105	V
Reverse Voltage	V_R		100	V
Peak Forward Current	I_{FM}		500	mA
Average Rectified Current	I_O		200	mA
Surge Forward Current	I_{FSM}	1s pulse	700	mA
Power Dissipation	P		300	mW
Junction Temperature	T_j		175	$^\circ\text{C}$
Storage Temperature	T_{stg}		-65 to +175	$^\circ\text{C}$

Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Voltage	V_F	$I_F=1.5\text{mA}$	0.55		0.65	V
Reverse Current	I_R	$V_R=100\text{V}$			0.1	μA
Interterminal Capacitance	C	$V_R=0\text{V}, f=1\text{MHz}$		1.5	3.0	pF
Reverse Recovery Time	t_{rr}	$V_R=6\text{V}, I_F=10\text{mA}, R_L=50\Omega$		2.0	4.0	ns

Reverse Recovery Time Test Circuit





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