

YG912S6 (10A)

(600V / 10A)

LOW LOSS SUPER HIGH SPEED RECTIFIER

Features

- Insulated package by fully molding
- Low V_F
- Super high speed switching
- High reliability by planer design

Applications

- High speed power switching
- Active filter circuit

Maximum ratings and characteristics

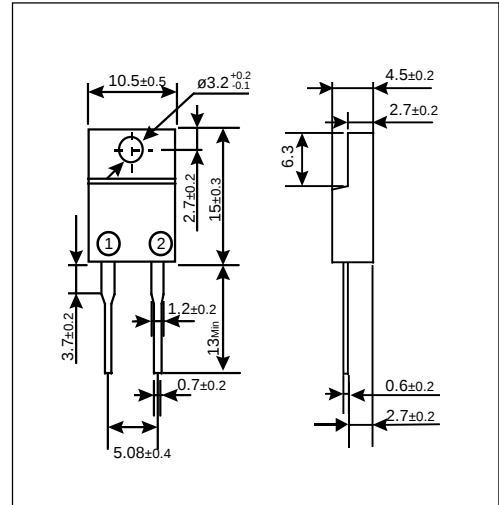
- Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		600	V
Non-Repetitive peak reverse voltage	V_{RSM}		600	V
Average output current	I_o	duty=1/2, $T_c=92^{\circ}\text{C}$ Square wave	10	A
Surge current	I_{FSM}	Sine wave 10ms	80	A
Operating junction temperature	T_j		-40 to +150	$^{\circ}\text{C}$
Storage temperature	T_{stg}		-40 to +150	$^{\circ}\text{C}$

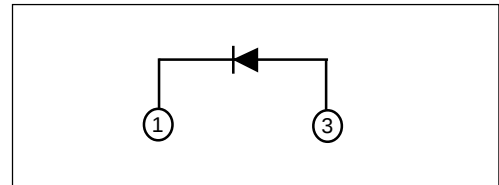
- Electrical characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_{FM}	$I_{FM}=10\text{A}$	1.7	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	500	μA
Reverse recovery time	t_{rr}	$I_F=0.1\text{A}$, $I_R=0.2\text{A}$, $I_{rec}=0.05\text{A}$	50	ns
Thermal resistance	$R_{th(j-c)}$	Junction to case	3.5	$^{\circ}\text{C/W}$

Outline drawings, mm



Connection diagram

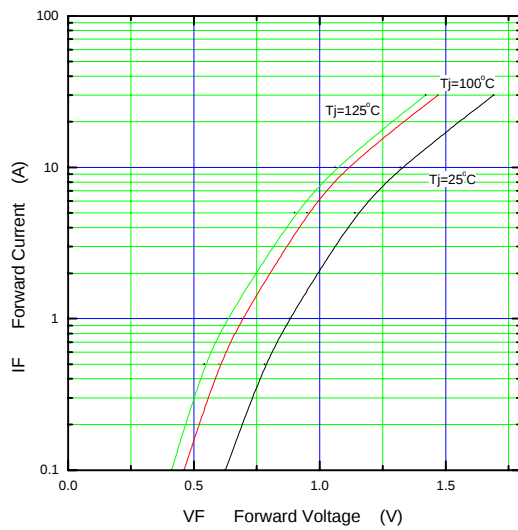


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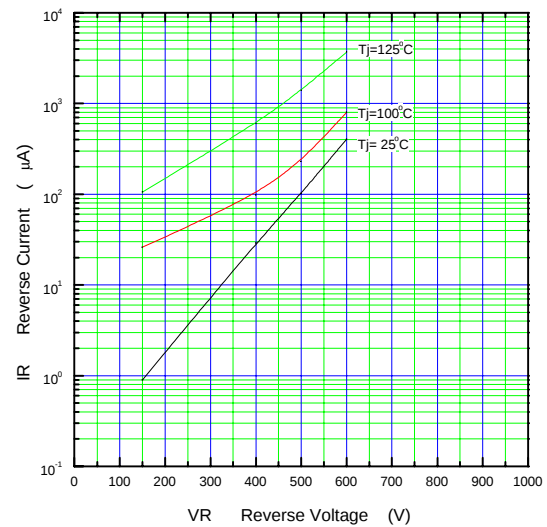
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Characteristics

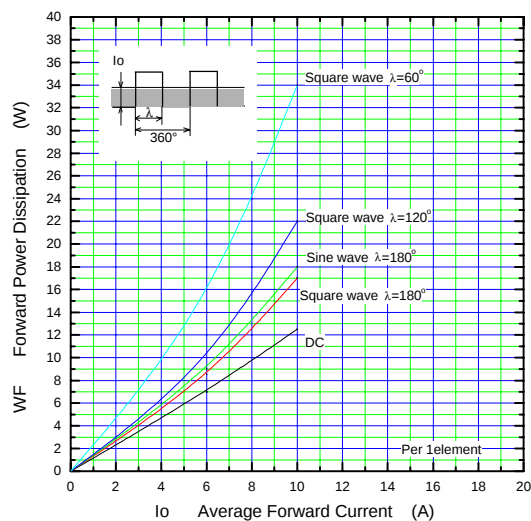
Forward Characteristic (typ.)



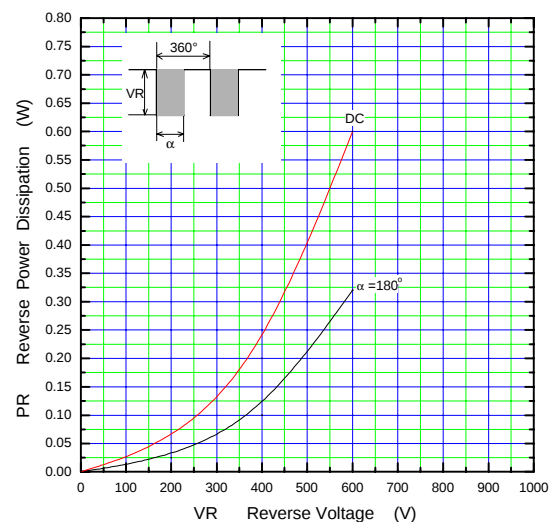
Reverse Characteristic (typ.)



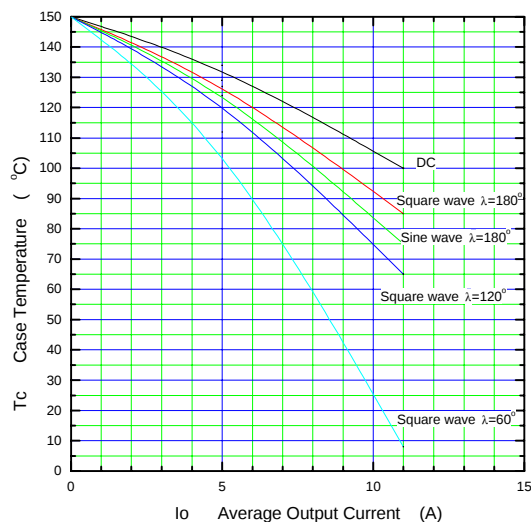
Forward Power Dissipation



Reverse Power Dissipation



Current Derating (I_o - T_c)



λ : Conduction angle of forward current for each rectifier element
 I_o : Output current of center-tap full wave connection

Junction Capacitance Characteristic (typ.)

