

YG123S15 (6A)

(1500V / 6A)

Fast recovery diode

Features

- Damper diode for high definition TV and high resolution display
- Insulated package by fully molding
- High voltage by mesa design
- High reliability

Applications

- High speed switching

Maximum ratings and characteristics

- Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		1500	V
Non-Repetitive peak reverse voltage	V_{RSM}		1500	V
Isolating voltage	V_{ISO}	Terminals-to-Case, AC.1min	1500	V
Average output current	I_o	Square wave, duty=1/2 $T_c=92^{\circ}C$	6	A
Non-repetitive surge current	I_{FSM}	Sine wave 10ms, 1shot	80	A
Operating junction temperature	T_j		+150	$^{\circ}C$
Storage temperature	T_{stg}		-40 to +150	$^{\circ}C$

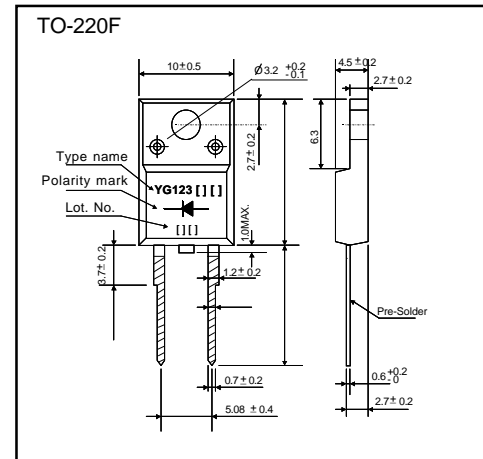
- Electrical characteristics ($T_c=25^{\circ}C$ Unless otherwise specified)

Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_F	$I_F=4A$	2.0	V
Reverse current	I_R	$V_R=V_{RRM}$	50.0	μA
Reverse recovery time	t_{rr}	$I_F=0.1A, I_R=0.1A$	0.5	μs

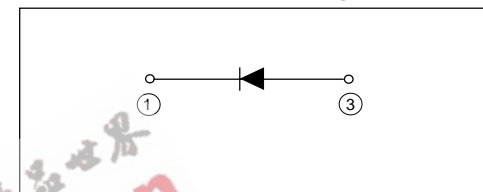
- Electrical characteristics ($T_c=25^{\circ}C$ Unless otherwise specified)

Item	Symbol	Condition	Max.	Unit
Thermal resistance	$R_{th(j-c)}$	Junction to case	3.5	$^{\circ}C/W$

Outline drawings, mm

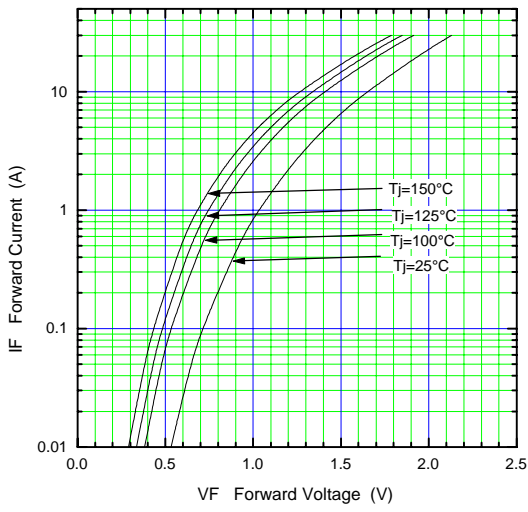


Connection diagram

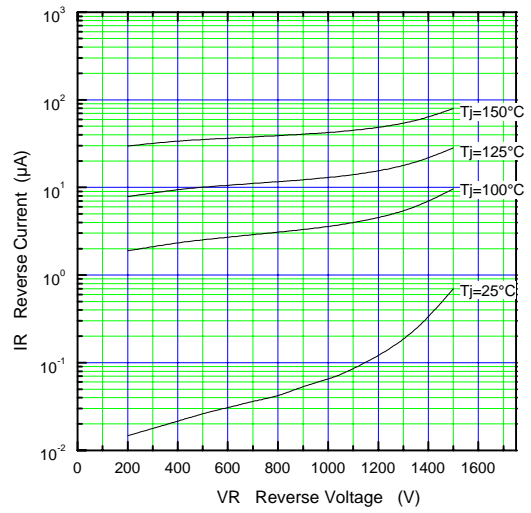


■ Characteristics

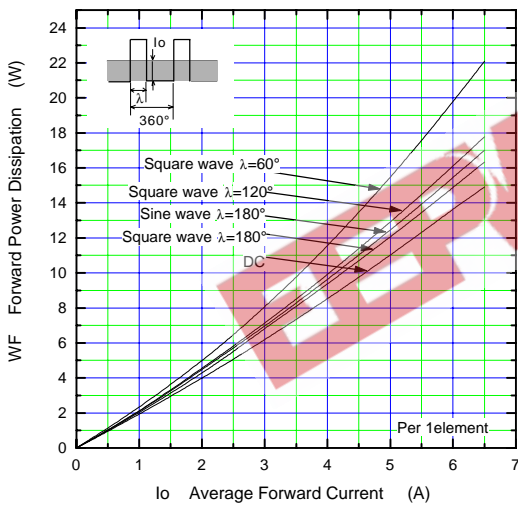
Forward Characteristic (typ.)



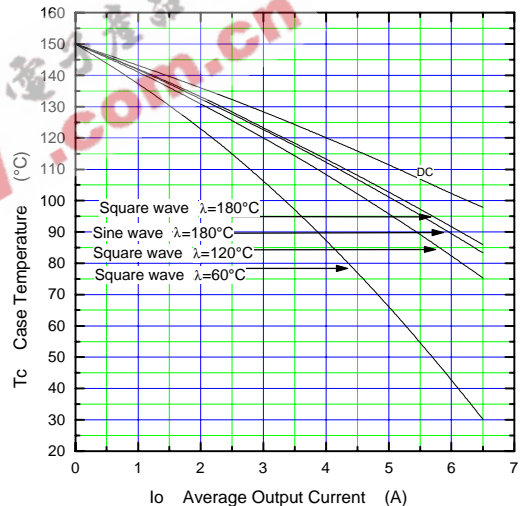
Reverse Characteristic (typ.)



Forward Power Dissipation

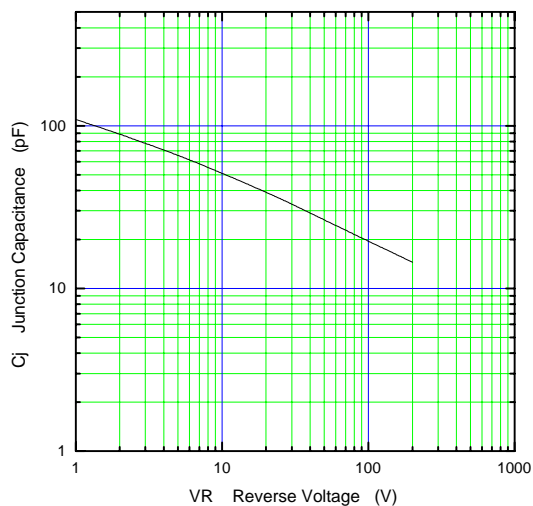


Current Derating (I_o-T_c)

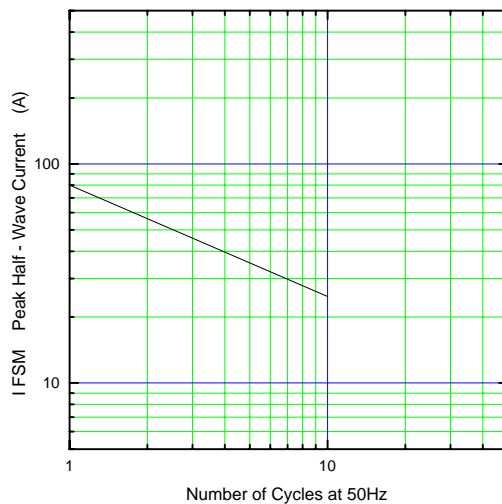


λ: Conduction angle of forward current for each rectifier element
I_o: Output current of center-tap full wave connection

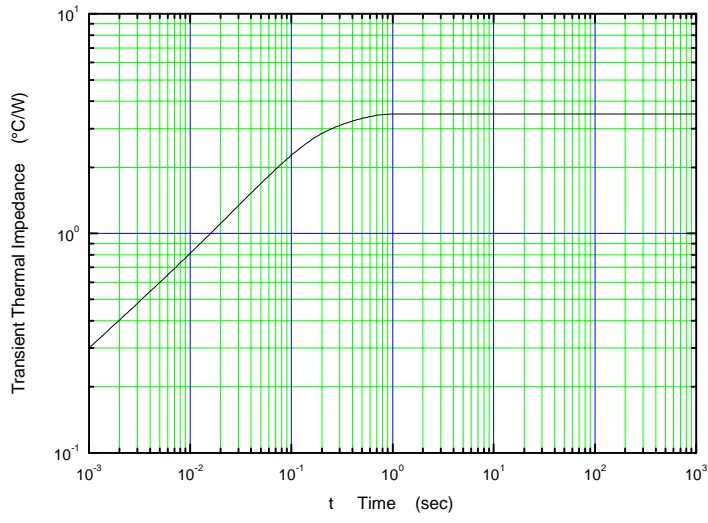
Junction Capacitance Characteristic (typ.)



Surge Capability



Transient Thermal Impedance



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