

# YG812S04R

FUJI Diode

## Schottky Barrier Diode

### ■ Maximum Rating and Characteristics

#### ● Maximum ratings (at Ta=25°C unless otherwise specified.)

Item	Symbols	Conditions	Ratings	Units
Repetitive peak surge reverse voltage	V <sub>RSM</sub>	tw=500ns, duty=1/40	48	V
Repetitive peak reverse voltage	V <sub>RRM</sub>	-	45	V
Isolating voltage	V <sub>iso</sub>	Terminals-to-case, AC.1min	1500	V
Average forward current	I <sub>FAV</sub>	50Hz Square wave duty =1/2 Tc = 124°C	10	A
Non-repetitive forward surge current	I <sub>FSM</sub>	Sine wave, 10ms 1shot	120	A
Operating junction temperature	T <sub>J</sub>	-	150	°C
Storage temperature	T <sub>stg</sub>	-	-40 to +150	°C

#### ● Electrical characteristics (at Ta=25°C unless otherwise specified.)

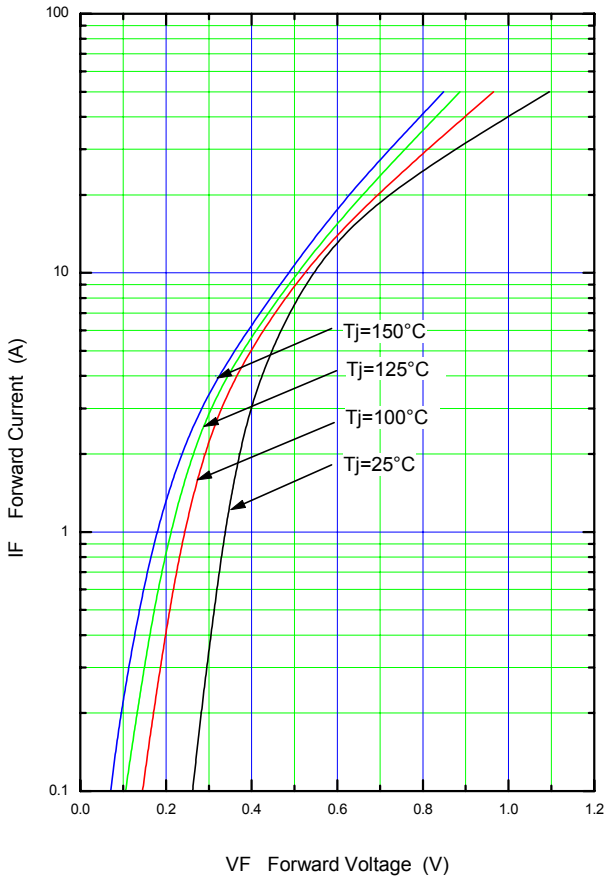
Item	Symbols	Conditions	Maximum	Units
Forward voltage	V <sub>F</sub>	I <sub>F</sub> =10 A	0.6	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RRM</sub>	2.0	mA
Thermal resistance	R <sub>th(j-c)</sub>	Junction to case	2.5	°C/W

#### ● Mechanical characteristics

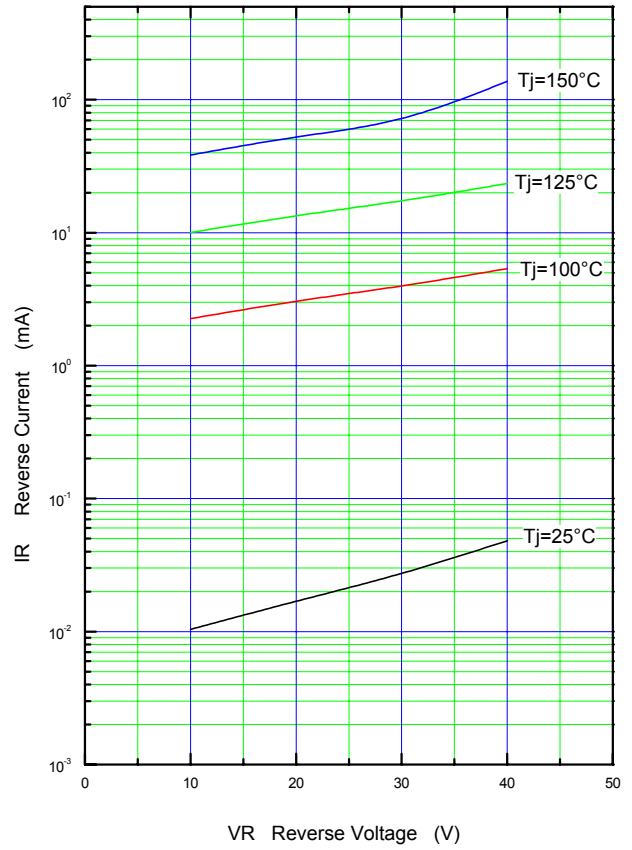
Item	Conditions	Maximum	Units
Mounting torque	Recommended torque	0.3 to 0.5	N•m
Approximate mass	-	1.7	g



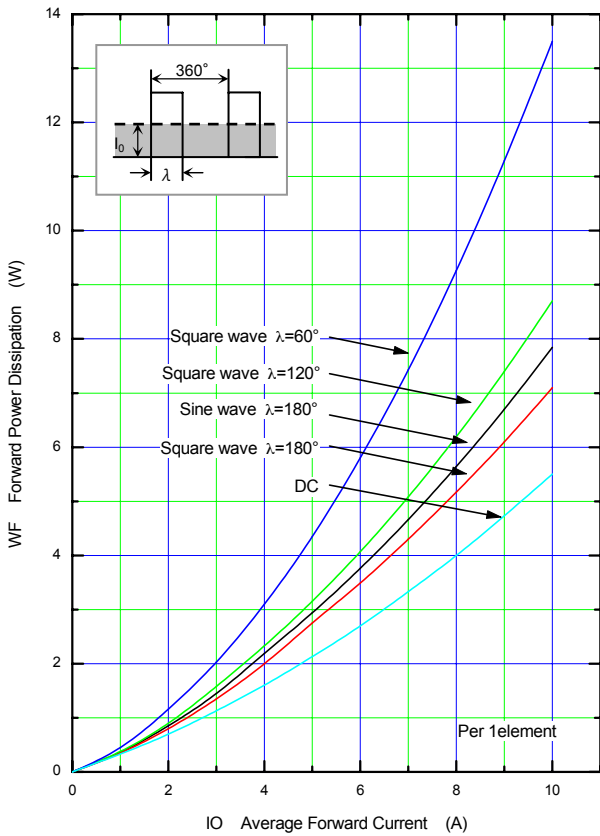
Forward Characteristic (typ.)



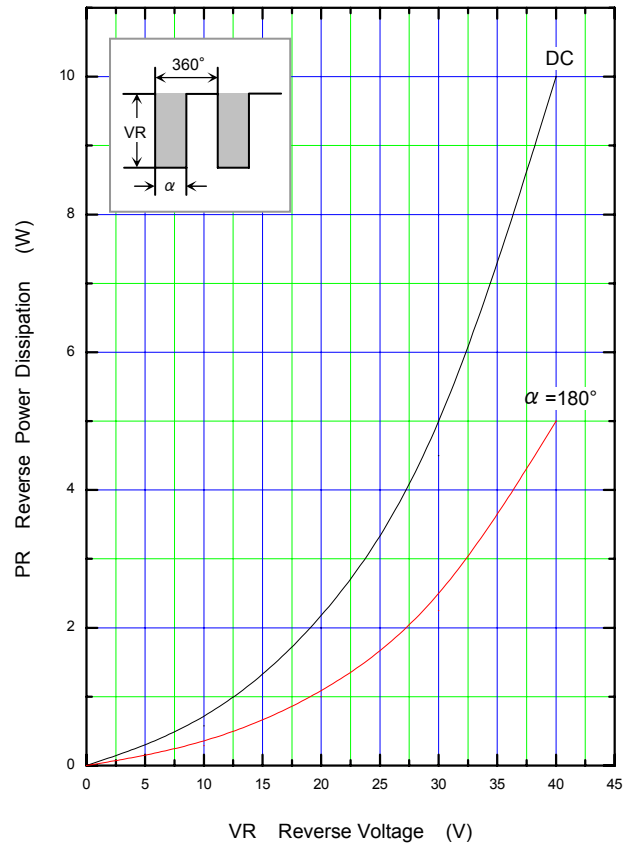
Reverse Characteristic (typ.)



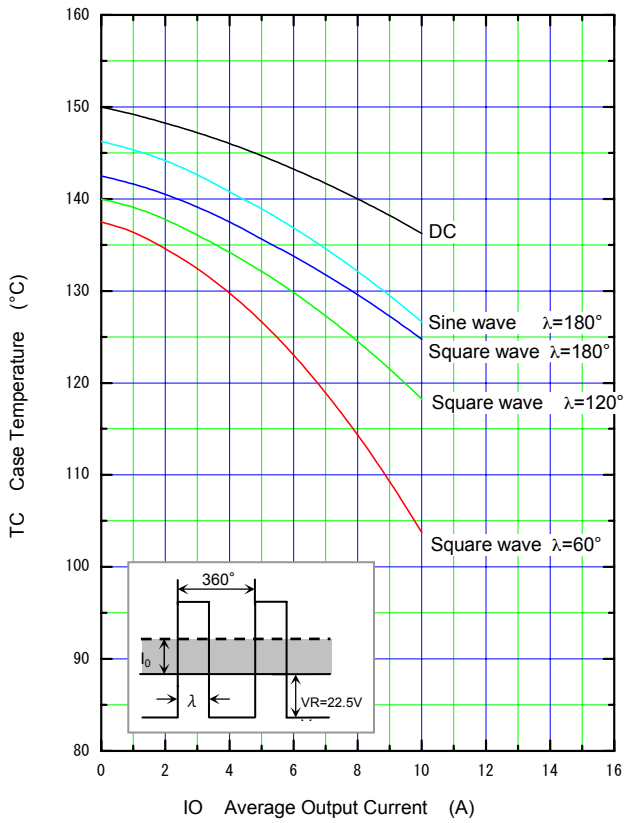
Forward Power Dissipation (max.)



Reverse Power Dissipation (max.)

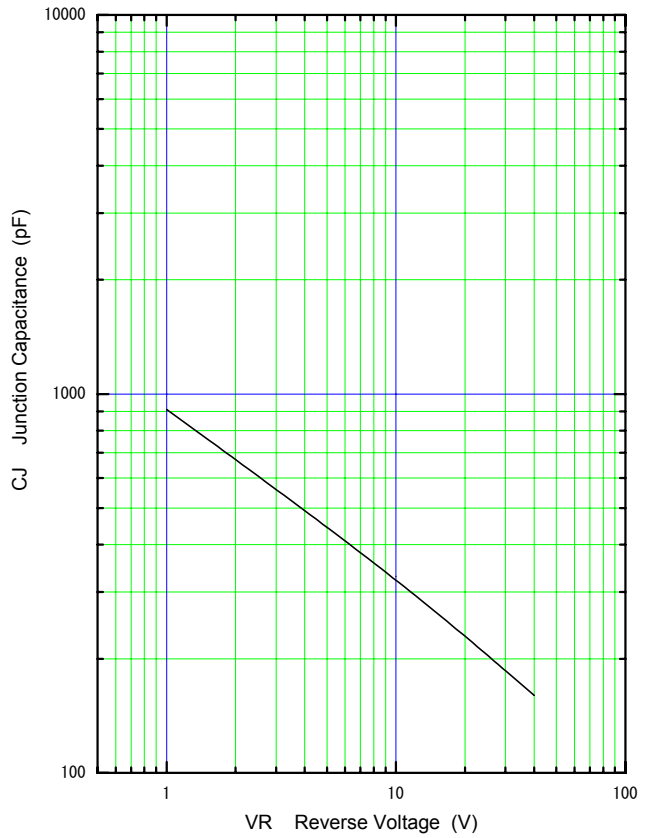


Current Derating (Io-Tc) (max.)

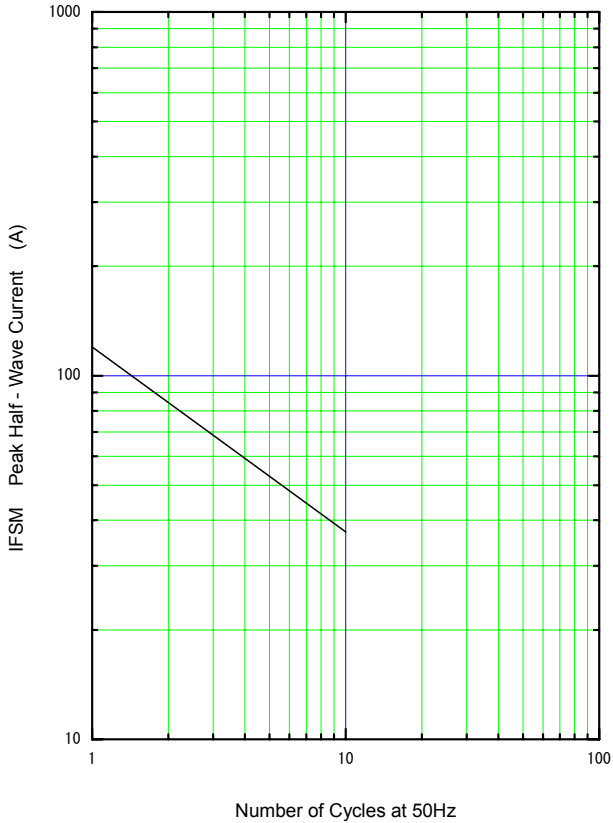


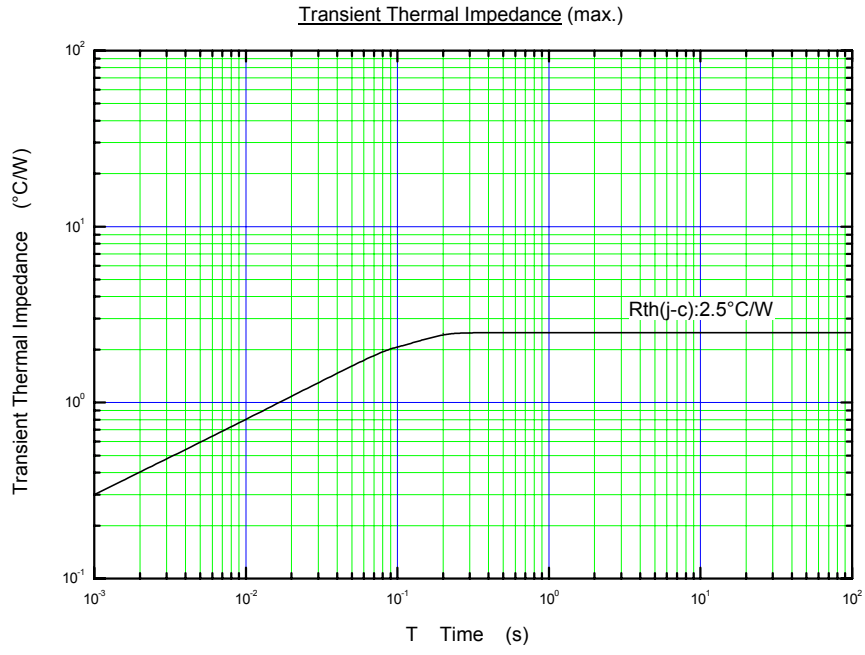
$f_c$ : Conduction angle of forward current for each rectifier element  
 $I_o$ : Output current of center-tap full wave connection

Junction Capacitance Characteristic (typ.)



Surge Capability (max.)





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