

# 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	$V_{RSM}$	tw=500ns, duty=1/40	48	V
Repetitive peak reverse voltage	$V_{RRM}$	-	45	V
Isolating voltage	$V_{iso}$	Terminals-to-case, AC.1min	1500	V
Average forward current	$I_{FAV}$	50Hz Square wave duty =1/2 Tc = 124°C	10	A
Non-repetitive forward surge current	$I_{FSM}$	Sine wave, 10ms 1shot	120	A
Operating junction temperature	Tj	-	150	°C
Storage temperature	Tstg	-	-40 to +150	°C

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

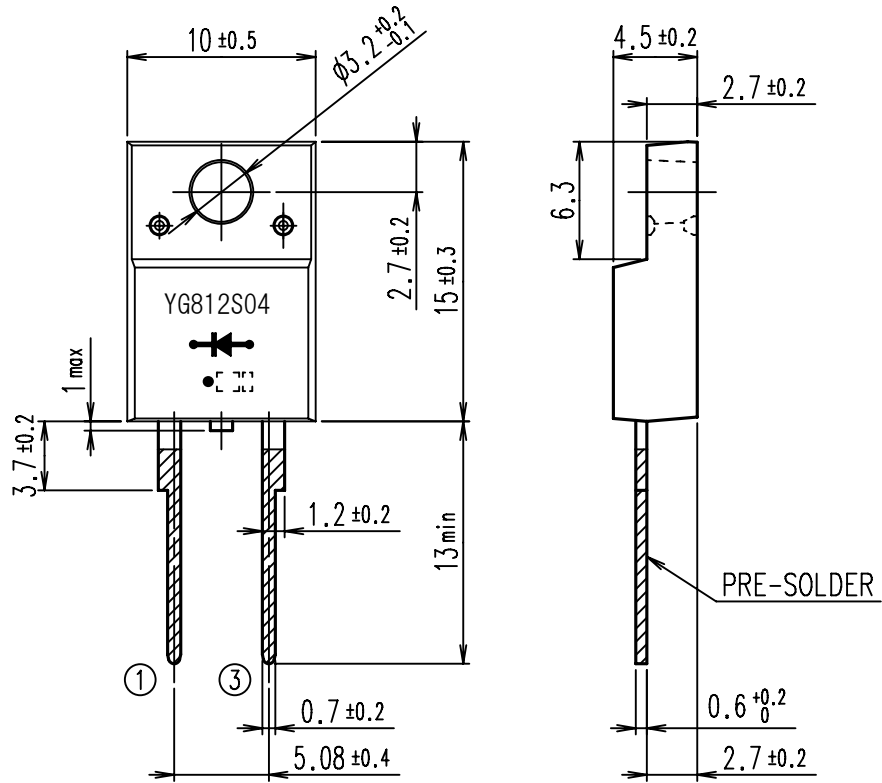
Item	Symbols	Conditions	Maximum	Units
Forward voltage	$V_F$	$I_F = 10\text{ A}$	0.6	V
Reverse current	$I_R$	$V_R = V_{RRM}$	2.0	mA
Thermal resistance	Rth(j-c)	Junction to case	2.5	°C/W

#### ● Mechanical characteristics

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

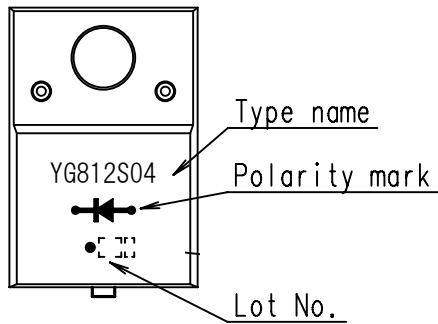
■ Outline Drawings [mm]

OUT VIEW



DIMENSIONS ARE IN MILLIMETERS.

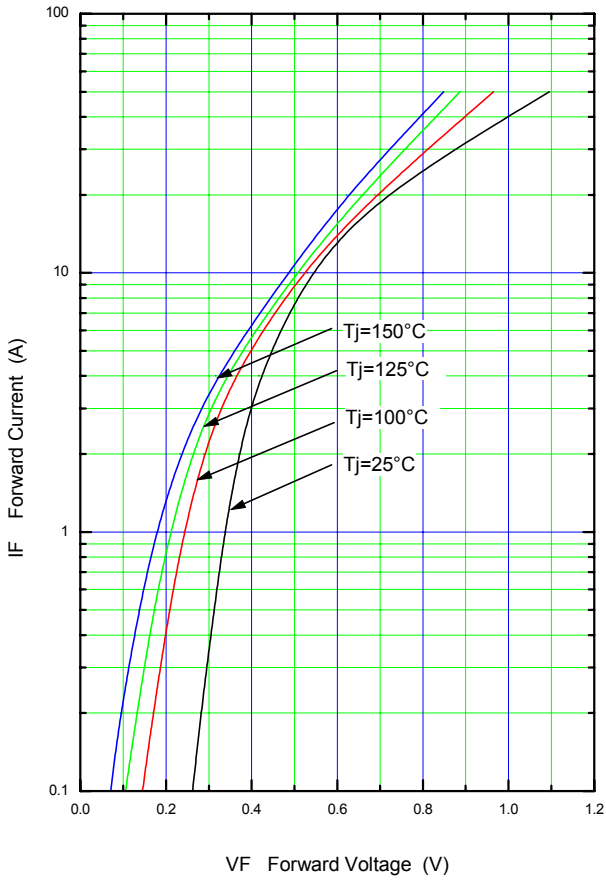
MARKING



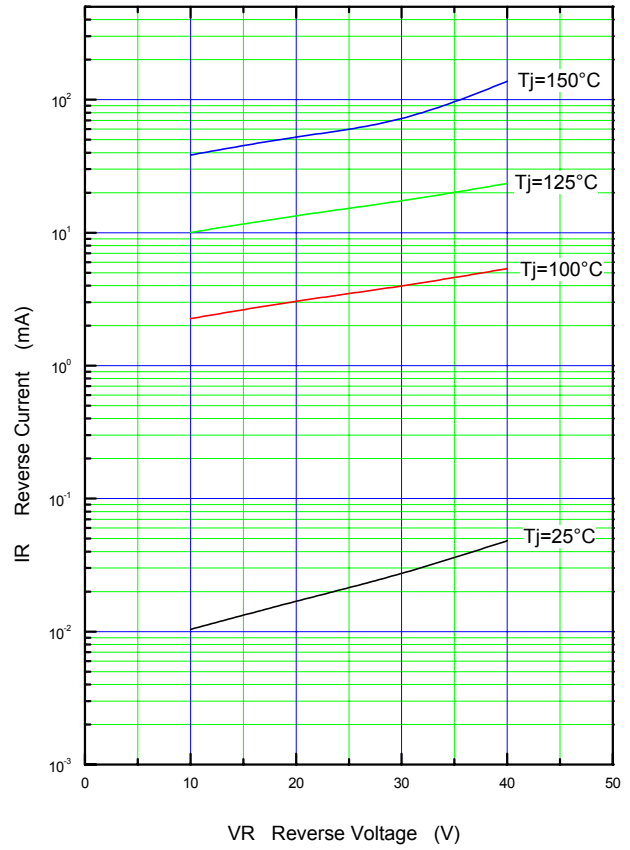
CONNECTION



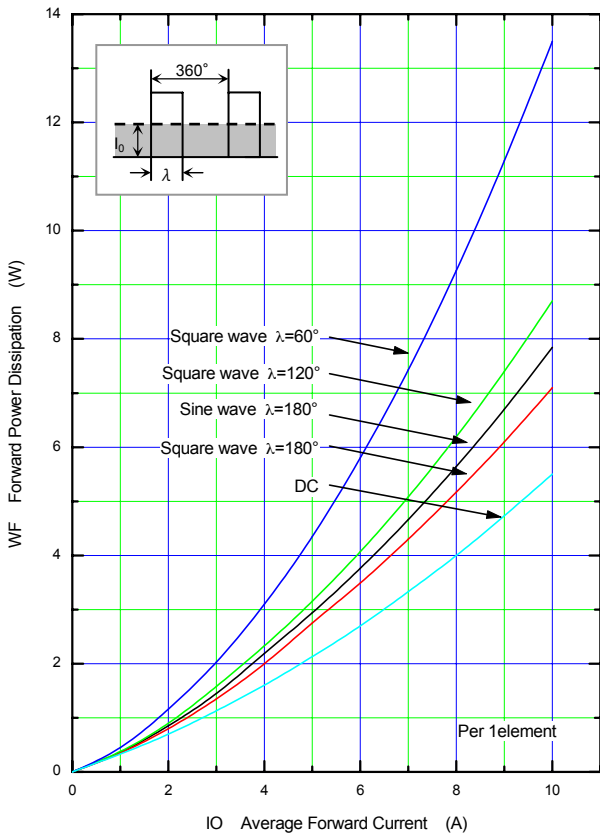
Forward Characteristic (typ.)



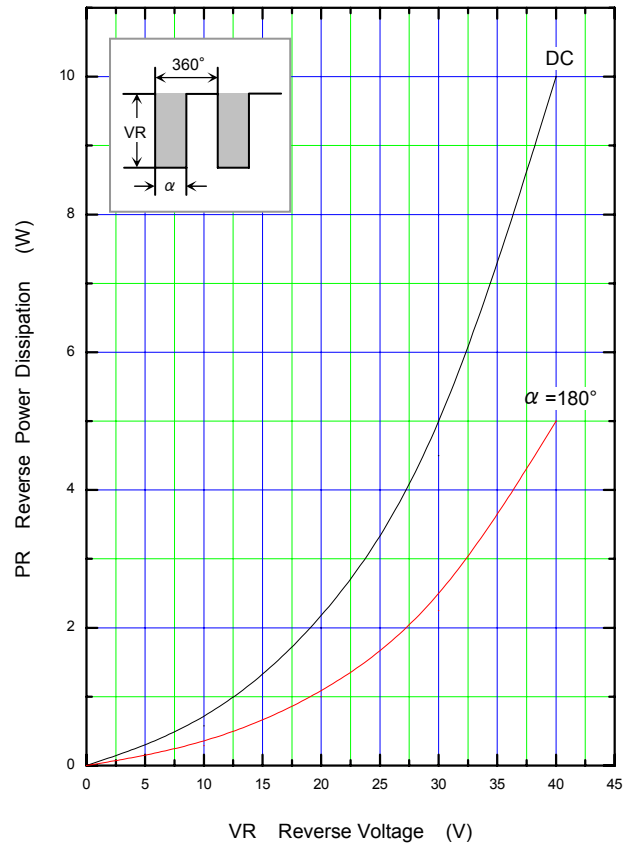
Reverse Characteristic (typ.)



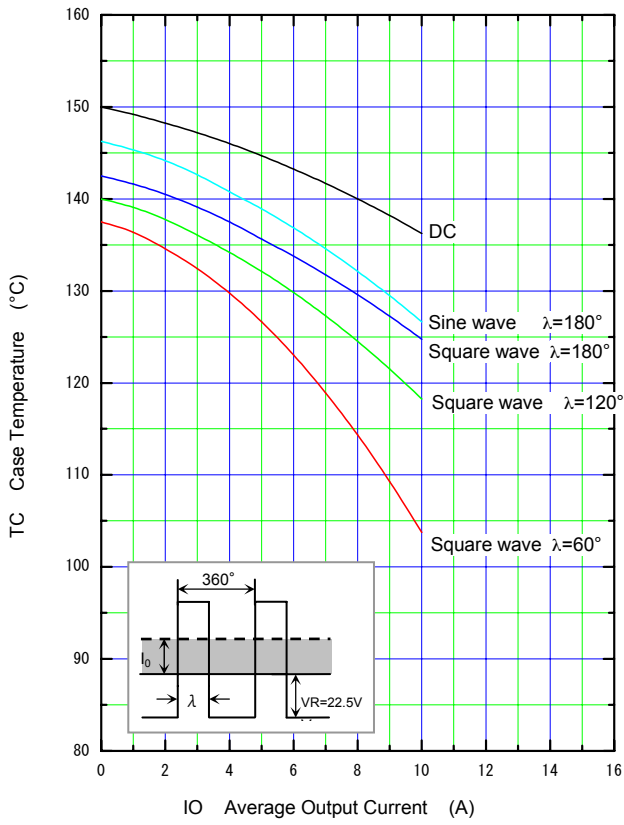
Forward Power Dissipation (max.)



Reverse Power Dissipation (max.)

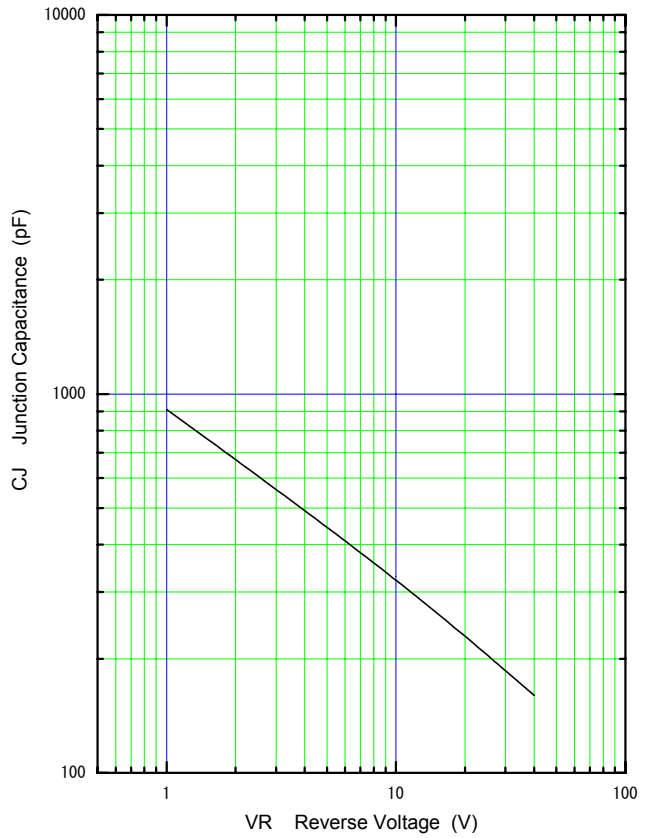


Current Derating (Io-Tc) (max.)

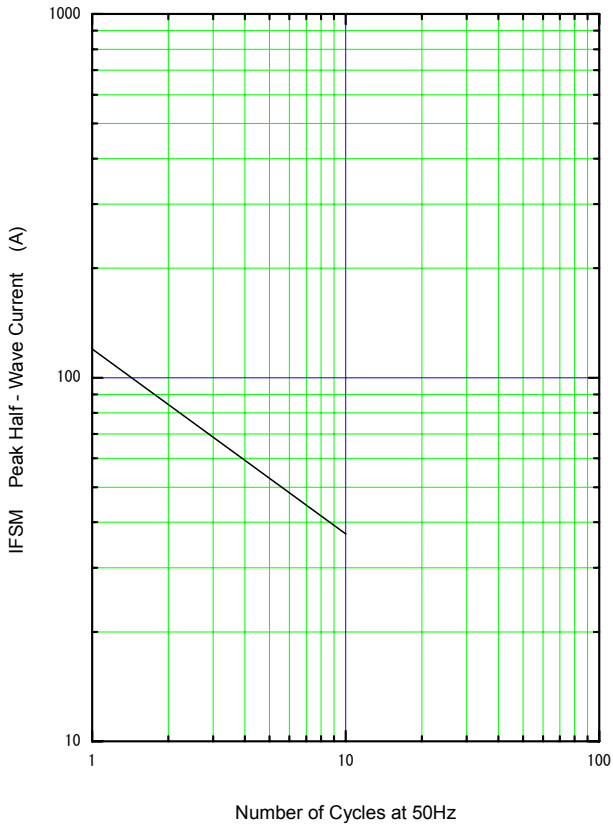


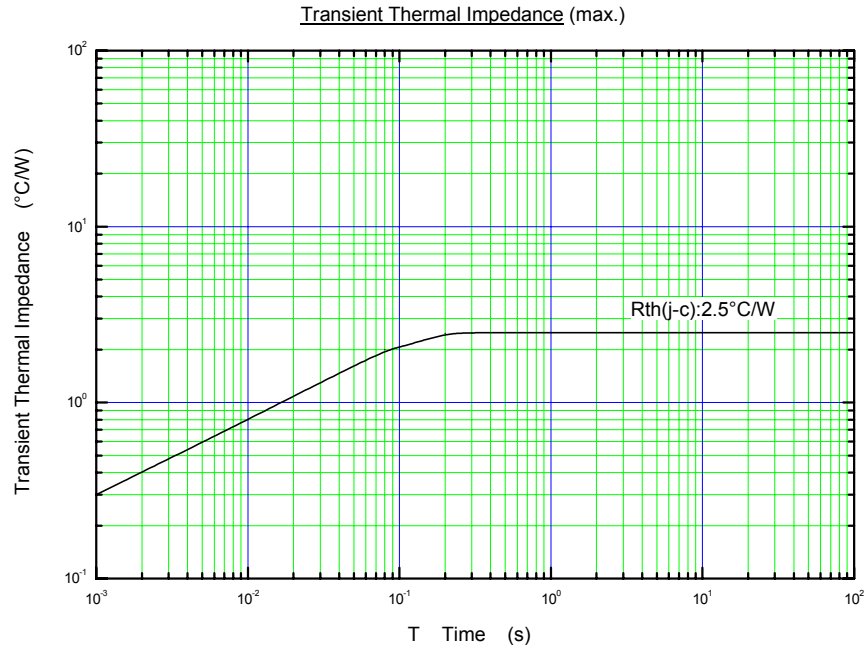
f<sub>c</sub>: Conduction angle of forward current for each rectifier element  
 I<sub>o</sub>: Output current of center-tap full wave connection

Junction Capacitance Characteristic (typ.)



Surge Capability (max.)





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  - Measurement equipment
  - Machine tools
  - Audiovisual equipment
  - Electrical home appliances
  - Personal equipment
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  - Safety devices
  - Medical equipment
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