

YG812S04R (10A)

(45V / 10A)

SCHOTTKY BARRIER DIODE

■ Features

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

■ Applications

- High speed power switching

■ Maximum ratings and characteristics

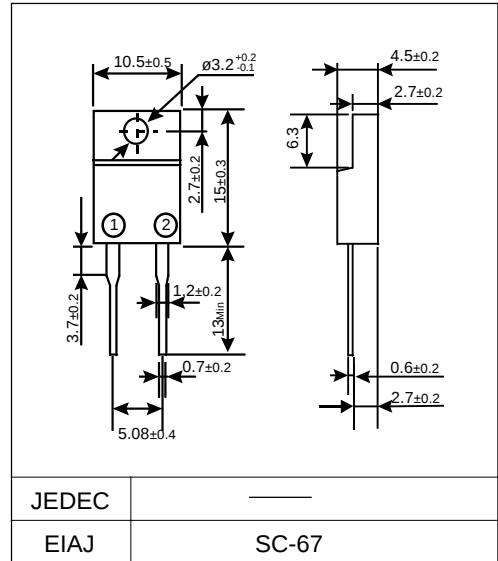
- Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	V_{RRM}		45	V
Non-repetitive peak reverse voltage	V_{RSM}	tw=500ns, duty=1/40	48	V
Isolating vltage	V_{iso}	Terminals to Case, AC. 1min.	1500	V
Average output current	I_o	Square wave, duty=1/2 Tc=124°C	10	A
Surge current	I_{FSM}	Sine wave 10ms	250	A
Operating junction temperature	T_j		-40 to +150	°C
Storage temperature	T_{stg}		-40 to +150	°C

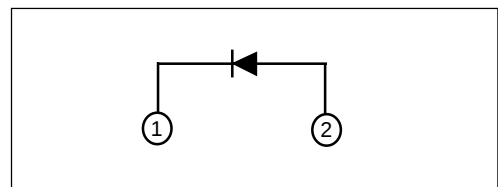
- Electrical characteristics (Ta=25°C Unless otherwise specified)

Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	V_{FM}	$I_{FM}=10A$	0.6	V
Reverse current	I_{RRM}	$V_R=V_{RRM}$	2.0	mA
Thermal resistance	$R_{th(j-c)}$	Junction to case	2.5	°C/W

■ Outline drawings, mm



■ Connection diagram

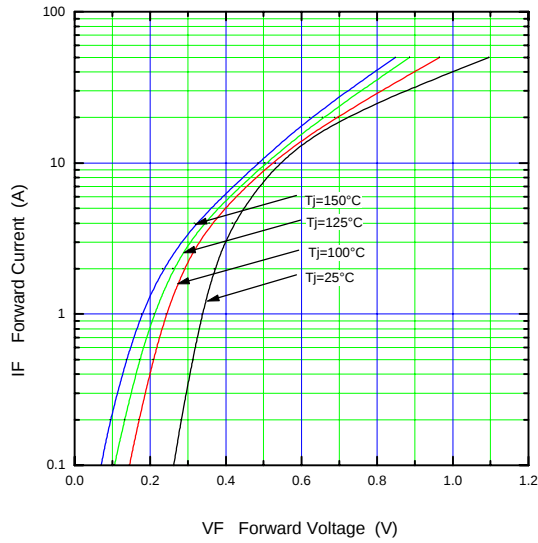


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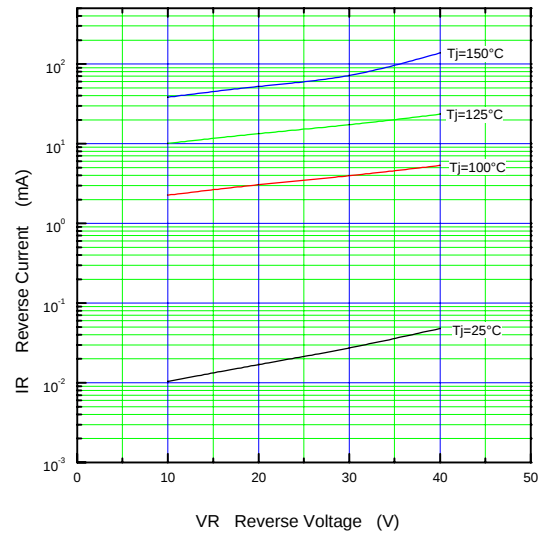
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Characteristics

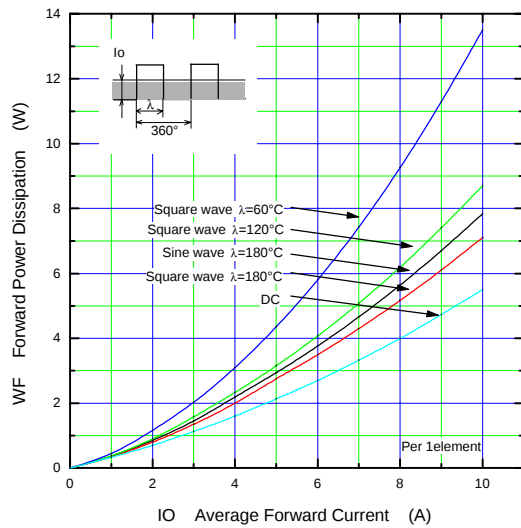
Forward Characteristic (typ.)



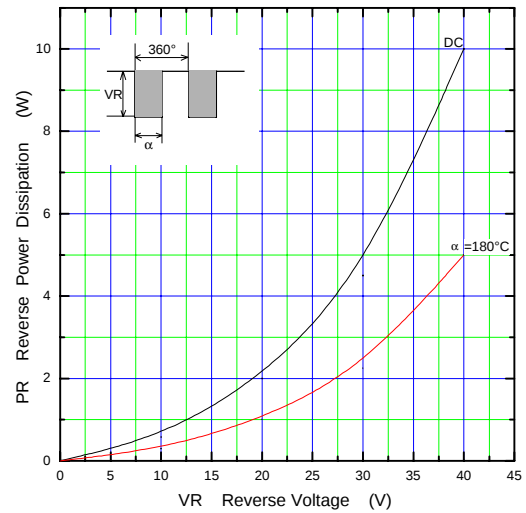
Reverse Characteristic (typ.)



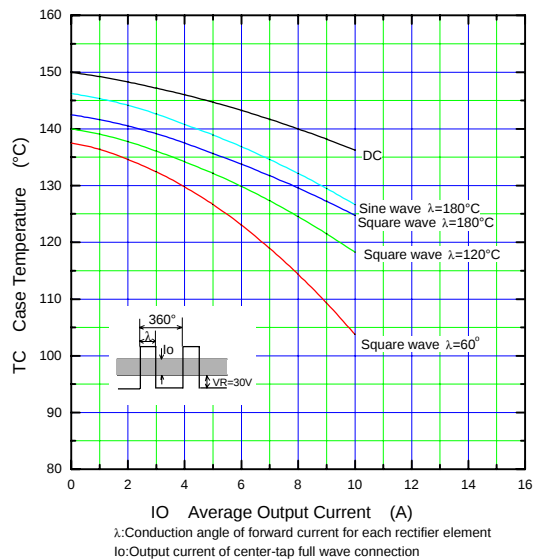
Forward Power Dissipation



Reverse Power Dissipation



Current Derating (Io-Tc)



Junction Capacitance Characteristic (typ.)

