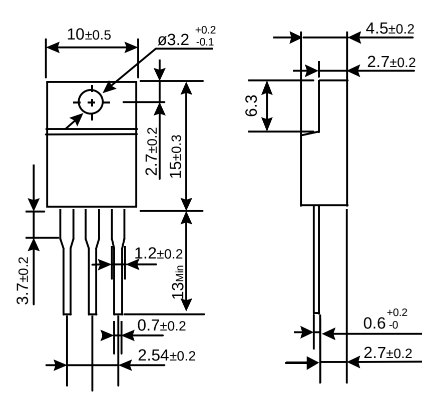
YG339C6,N6,D6 (5A) (600V / 5A)

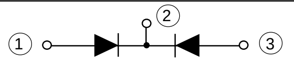
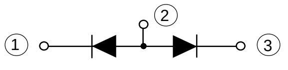
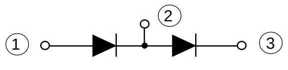
FAST RECOVERY DIODE

Outline drawings, mm



JEDEC	—
EIAJ	SC-67

Connection diagram

YG339C6	
YG339N6	
YG339D6	

Features

- 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}		600	V
Non-repetitive peak reverse voltage	V_{RSM}		600	V
Isolating voltage	V_{iso}	Terminals-to-Case, AC.1min	1500	V
Average output current	I_O	Square wave, duty=1/2, Tc=110°C	5*	A
Surge current	I_{FSM}	Sine wave 10ms	20	A
Operating junction temperature	T_j		+150	°C
Storage temperature	T_{stg}		-40 to +150	°C

*Average forward current of centertap full wave connection

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

Item	Symbol	Conditions	Max.	Unit
Forward voltage drop **	V_{FM}	I_{FM}=2.0A	2.5	V
Reverse current **	I_{RRM}	V_R=V_{RRM}	100	µA
Reverse recovery time	trr	I_F=0.1A, I_R=0.1A, Irec=0.01A	0.05	µs
Thermal resistance	$R_{th(j-c)}$	Junction to case	3.5	°C/W

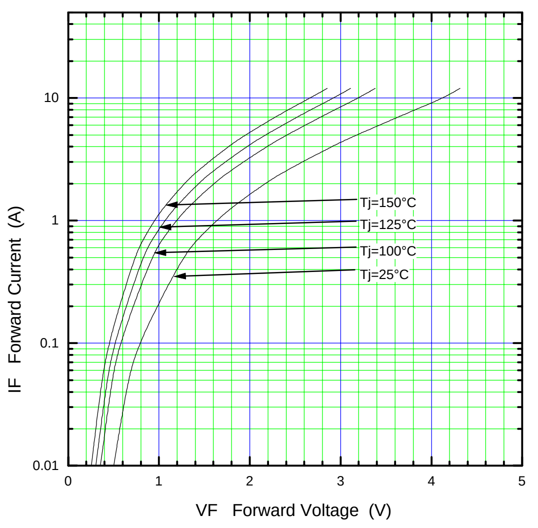
** Rating per element

- Mechanical characteristics

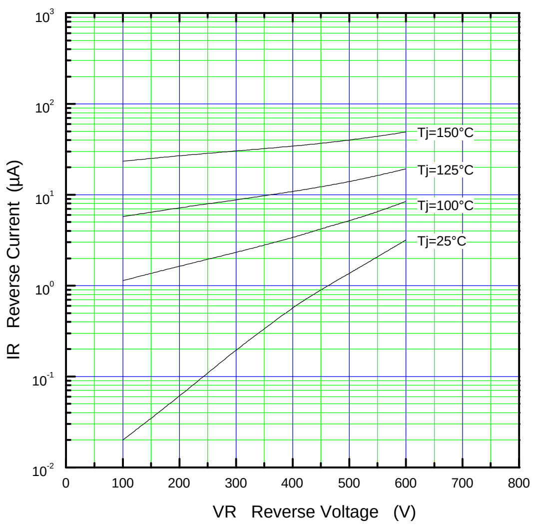
Mounting torque	Recommended torque	0.3 to 0.5	N·m
Approximate weight		2.3	g

■ Characteristics

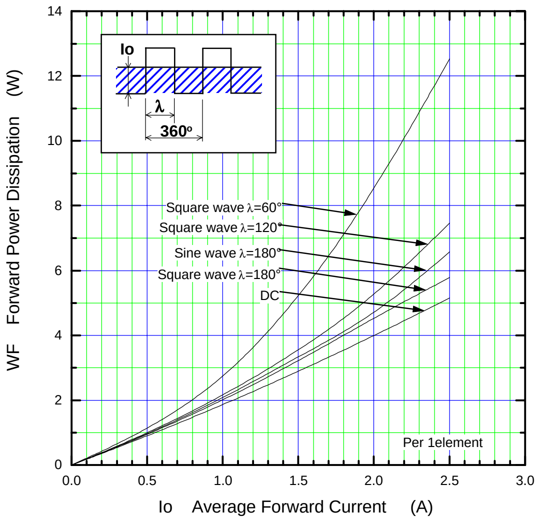
Forward Characteristic (typ.)



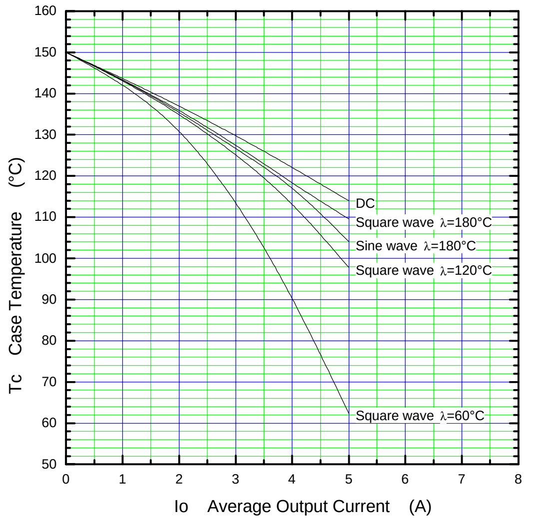
Reverse Characteristic (typ.)



Forward Power Dissipation

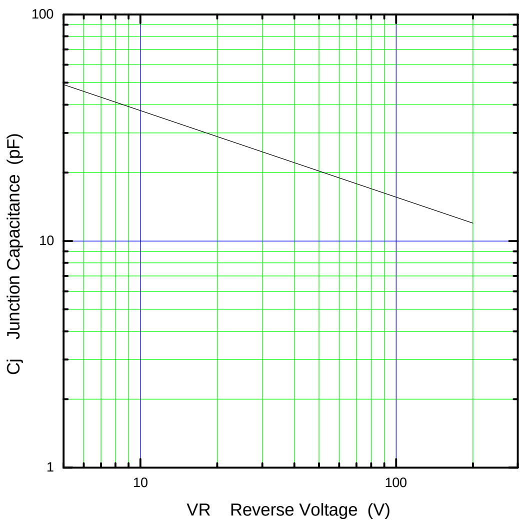


Current Derating (Io-Tc)

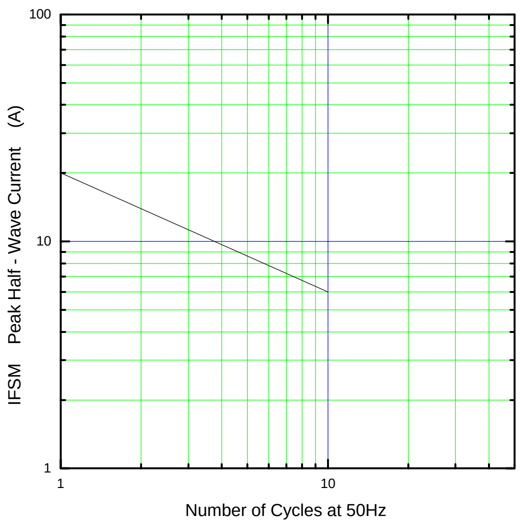


λ:Conduction angle of forward current for each rectifier element
Io:Output current of center-tap full wave connection

Junction Capacitance Characteristic (typ.)



Surge Capability



Transient Thermal Impedance