# POWER DIODE MODULE

Features

- All the terminals and the mounting plate are electrically isolated. These modules can be installed in the same cooling fin as other modules, thus saving installation space − a cost-effective feature.
- The diode chips are coated with a glass of zinc oxide, making them highly resistant to temperature and humidity variation.
- 6 diode chips are connected to the 3-phase bridge rectifying circuit inside the module-a cost-effective feature.
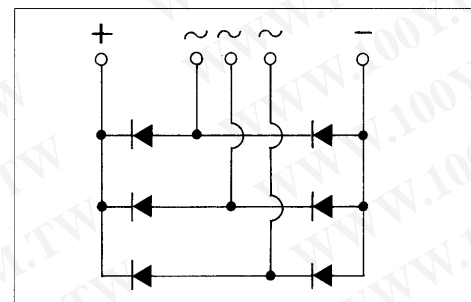
Applications

- Inverters for AC motors
- Power supply units for DC motors
- DC power supply units for battery chargers
- General purpose DC power supply units

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胜特力电子(上海) 86-21-34970699
胜特力电子(深圳) 86-755-83298787
Http://www.100y.com.tw

■ Outline Drawings

CASE	R606
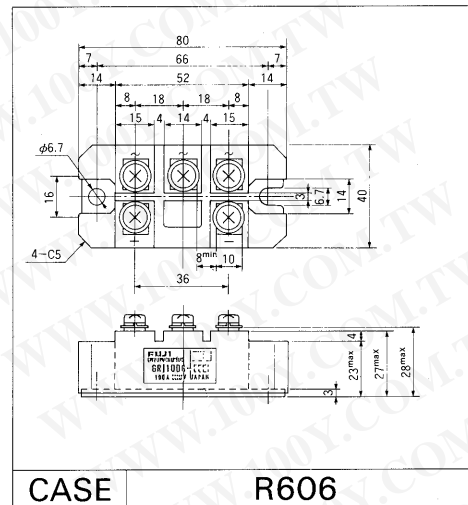
■ Inner Circuit Schematic

■ Maximum Ratings and Characteristics

● Absolute Maximum Ratings

Items	Symbols	Conditions	6RI100G −120	6RI100G −160	Units
Repetitive peak reverse voltage	V_{RRM}		1200	1600	V
Non-repetitive peak reverse voltage	V_{RSM}		1320	1760	V
Average output current	I_O	50/60 Hz Sinewave, $T_C = 97°C$	100		A
Surge current	I_{FSM}	Rated load conditions	1200		A
I^2_t	I^2_t	Rated load conditions	6000		A^2s
Junction temperature	T_j		$-40\sim+150$		°C
Storage temperature	T_{stg}		$-40\sim+125$		°C
Tightening torque		Mounting screw: M5	25 ± 5		kg·cm
Vibration resistance			5		G
Dielectric strength		Between terminals and base	2500 VAC 1 min		
Net. Weight			230		g

● Electrical Characteristics

Items	Symbols	Conditions	Min	Typ	Max	Units
Forward voltage	V_{FM}	$T_j=25°C$, $I_{FM}=100$ A			1.25	V
Reverse current	I_{RRM}	$T_j=150°C$, $V_R=V_{RRM}$			20	mA

● Thermal Characteristics

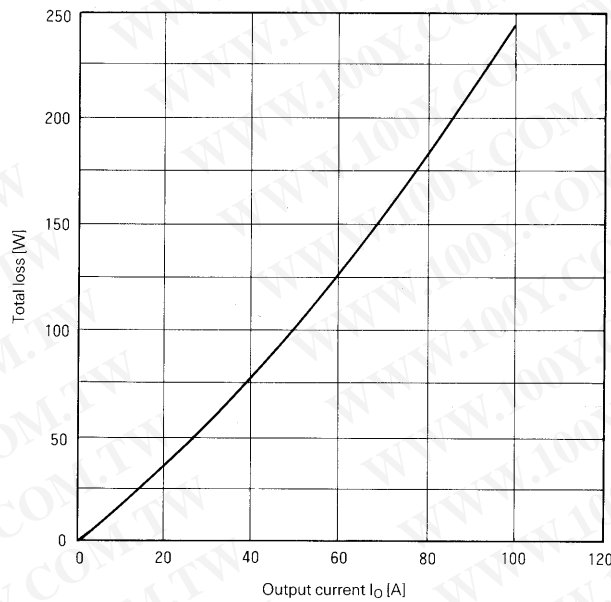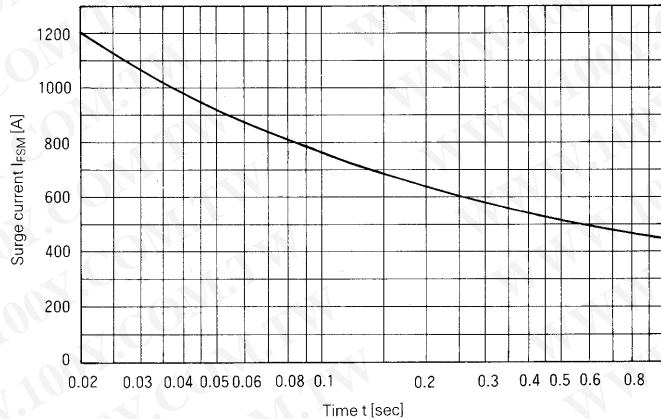| Items	Symbols	Conditions	Min	Typ	Max	Units
Thermal resistance (Junction to case)	$R_{th(j-c)}$	50/60 Hz Sinewave, Thermal resistance for total loss			0.22	°C/W
Thermal resistance	$R_{th(c-f)}$	With thermal compound			0.06	°C/W

■ Characteristic curves
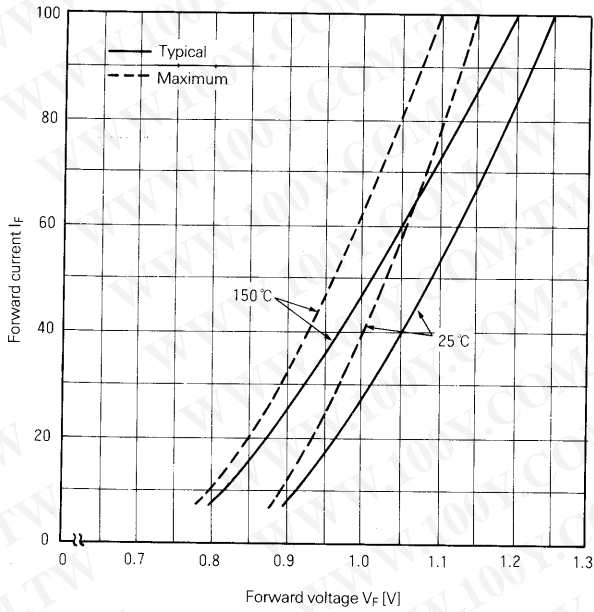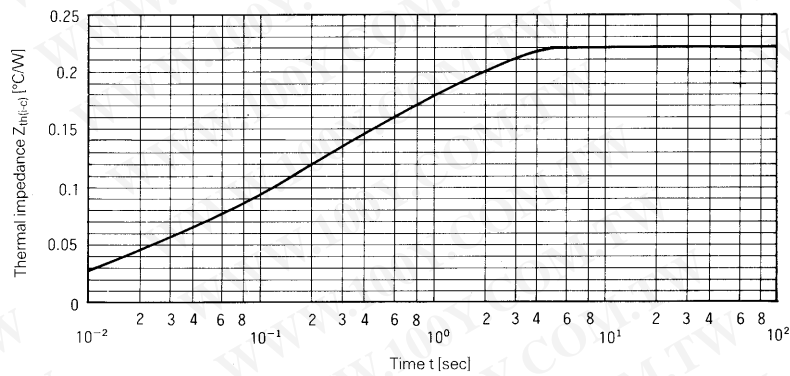

Forward Characteristics
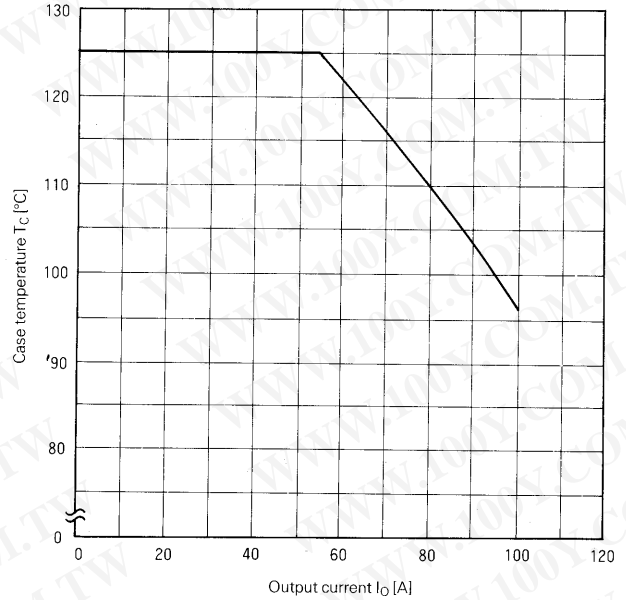
Case Temperature—Output Current

Output Current—Total Loss

Surge Current

Transient Thermal Impedance