

# GUO45-1600

**PRV : 1600 Volts**  
**Io : 45 Amperes**

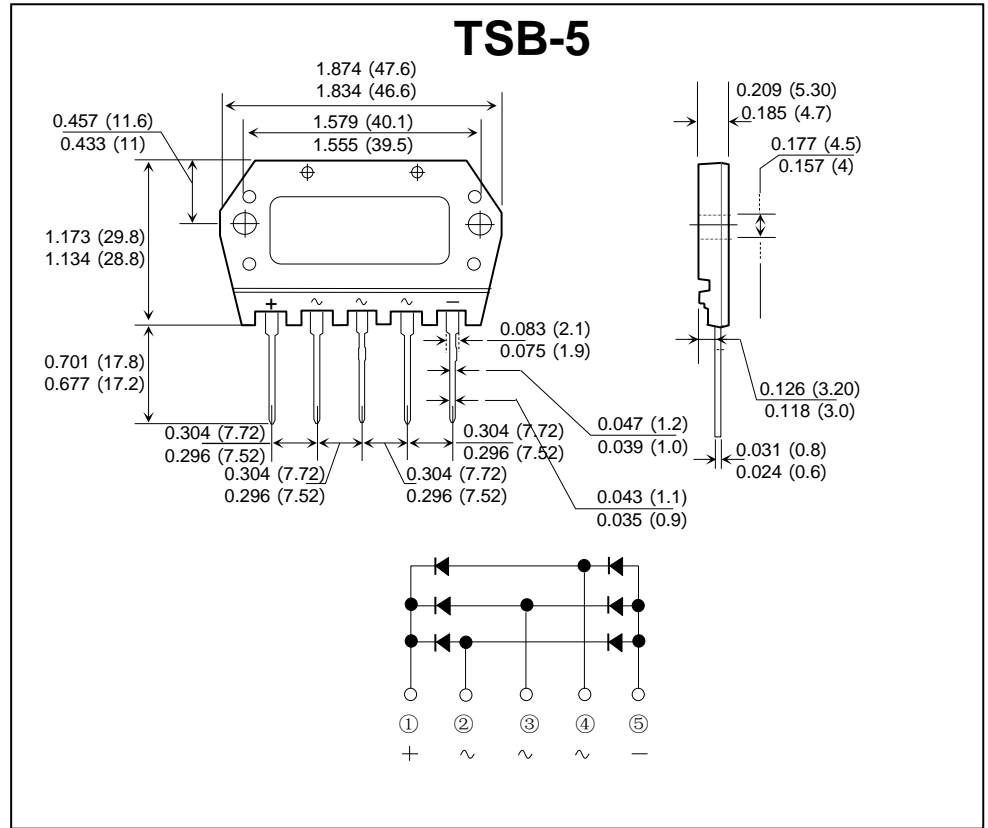
**FEATURES :**

Glass passivated chip  
 High surge forward current capability

**Application :**

For the three rectifier power

## BRIDGE RECTIFIERS



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

RATING	SYMBOL	GUO45-1600	UNIT
Repetitive Peak Reverse Voltage	VRRM	1600	V
Maximum RMS Voltage	VRMS	1120	V
Maximum DC Blocking Voltage	VDC	1600	V
Maximum Average Rectified Output Current 60Hz sine wave, R-load With heatsink Tc = 110°C	IF(AV)	45	A
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	450	A
Current Squared Time at 1ms ≤ t < 8.3ms Tj = 25, Rating of per diode	i²t	500	A²S
Maximum Forward Voltage per Diode at IF = 15 A	VF	1.2	V
Peak Reverse Current Ta = 25 °C	IR	10	µA
Typical Thermal Resistance at Junction to Case	RθJC	0.8	°C/W
Operating Junction Temperature Range	TJ	- 55 to + 150	°C
Storage Temperature Range	TSTG	- 55 to + 150	°C

**Note :**

1) Thermal resistance from Junction to Case with units mounted on heat sink.



RATING AND CHARACTERISTIC CURVES ( GUO45-1600 )

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

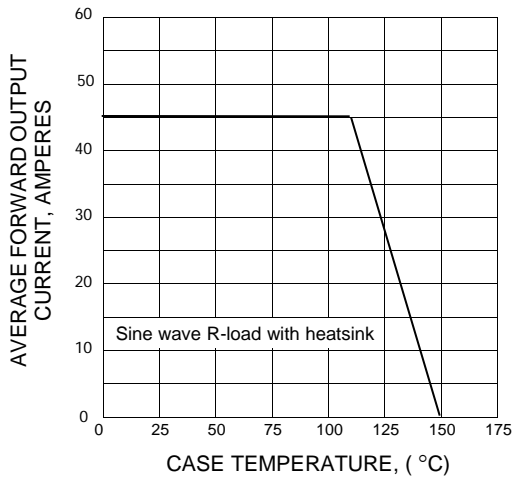


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

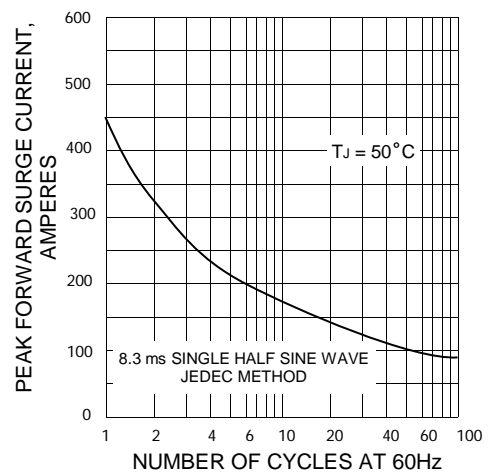


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

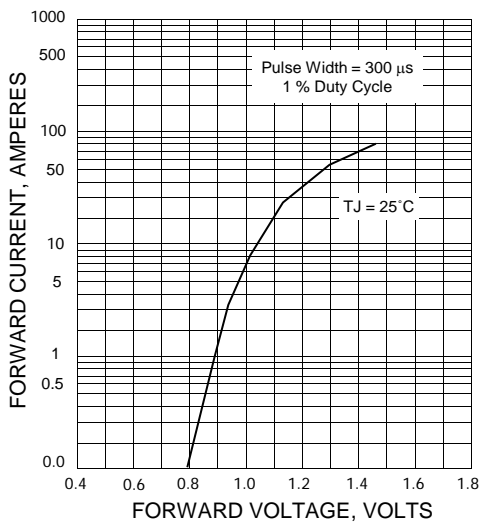


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

