

# DATA SHEET

TYPE: 30A/3000V

Package: T0-247

Prepared by	Audit by	Approved by

## Product specifications

**VRRM = 3000V**

**IFAV = 30 A**

**VF = 1.88V**

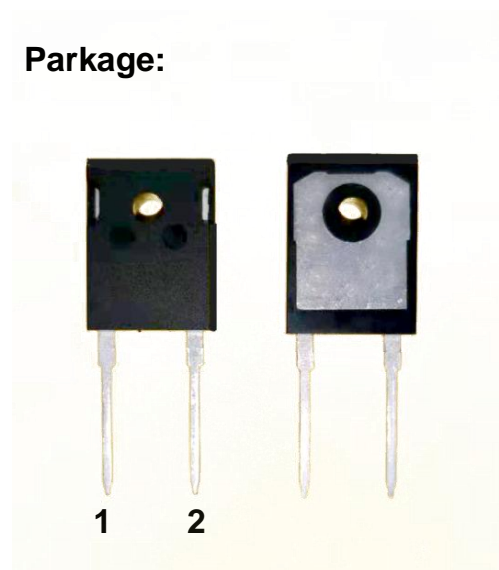
### Product Application:

- Household Electric Appliances
- Industrial power supply
- Industrial automation equipment
- Electric welding machine

### Product Features:

- Glass passivated chip
- Low Reverse Leakage Current
- High surge current capability to 900 Amperes
- ROHS compliance
- High temperature soldering guaranteed:  
260°C±5°C/10 seconds (2.3kg.F) tension

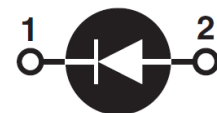
### Package:



### Mechanical Data:

- Terminals: Nickel-plated ( 6.30mm ) Faston lugs
- Polarity : Polarity symbols being marked on body
- Mounting Position : Fixing the bridge rectifier with M6 screw to the heat sink . Coat silicon thermal compound between backside of the bridge ,which will be contacted with the heat sink for maximizing heat transfer.
- Higher Reliability Systems
- Weight : 5.7 grams

### Circuit diagram



1 - Cathode  
2 - Anode  
Back of Case - Cathode

**MAXIMUM RATINGS**

All Ratings: Tc = 25° C unless otherwise specified.

Symbol	Characteristic / Test Conditions	TYP	UNIT
VR	Maximum D. C. Reverse Voltage	3000	Volts
VRRM	Maximum Peak Repetitive Reverse Voltage		
IF(AV)	Maximum Average Forward Current (Tc = 100°C)	30	Amps
IFSM	Non-Repetitive Forward Surge Current (Tj = 25°C, 10ms)	900	
i <sup>2</sup> t	Rating for fusing, 8.3ms, Tj=25°C, Rating of per diode	3360	A <sup>2</sup> S
TJ	Junction Temperature Range	-40 to 150	° C
TSTG	Storage Temperature Range	-40 to 150	
TL	Lead Temperature for 10 Sec	260	

**STATIC ELECTRICAL CHARACTERISTICS**

Symbol	Characteristic / Test Conditions	TYP	MAX	UNIT	
VF	Forward Voltage	IF = 11A, TJ = 25°C	1.73	1.9	Volts
		IF = 30A, TJ = 25°C	1.88	2.0	
IRM	Maximum Reverse Leakage Current	VR = 3000V, TJ =25°C		10	uA

**THERMAL AND MECHANICAL CHARACTERISTICS**

Symbol	Characteristic / Test Conditions	30EPS30 H	UNIT
R <sub>θ JC</sub>	Junction-to-Case Thermal Resistance	1.0	°C/W
Wt	Package Weight	5.7	g
Torque	Maximum Mounting Torque	10	Nm

TYPICAL PERFORMANCE CURVES

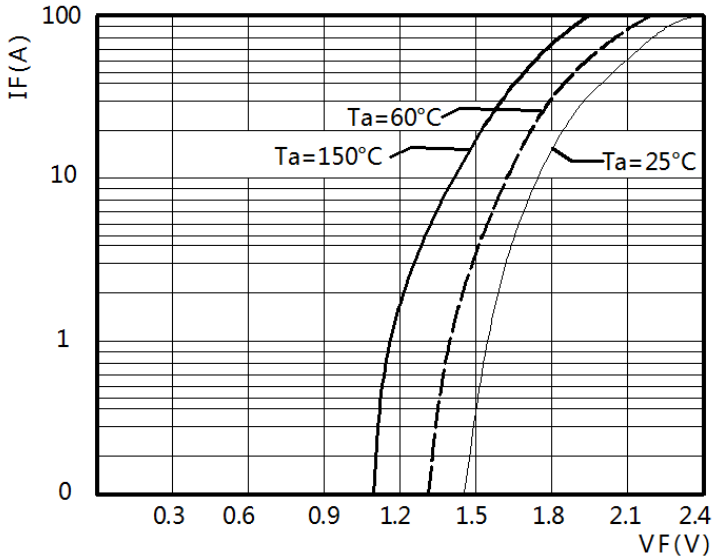


FIGURE 1. FORWARD CURRENT vs FORWARD VOLTAGE

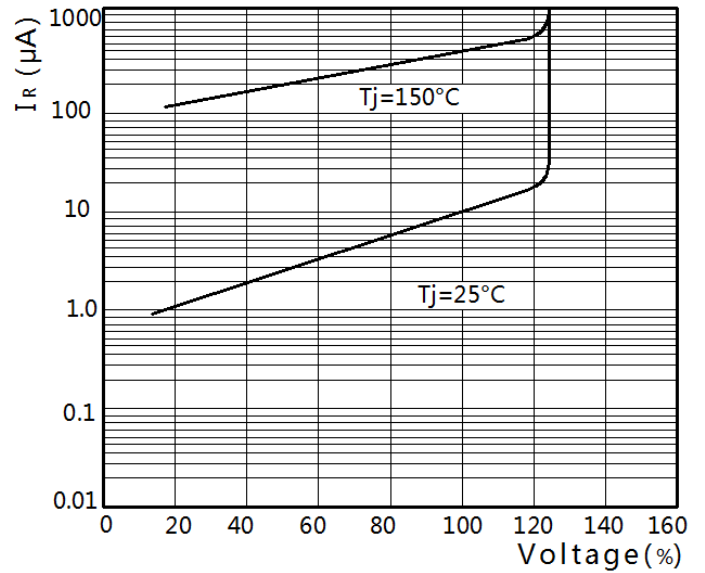


FIGURE 2. REVERSE CURRENT vs REVERSE VOLTAGE

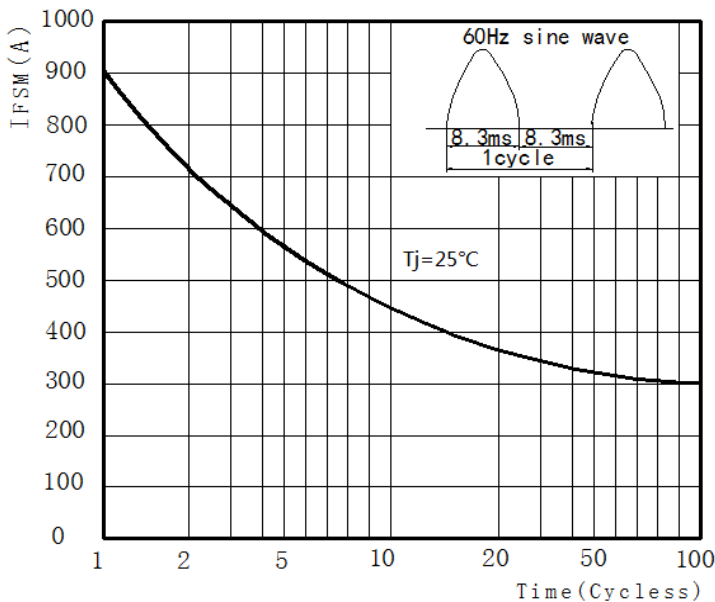


FIGURE 3. Peak Surge Forward Capability

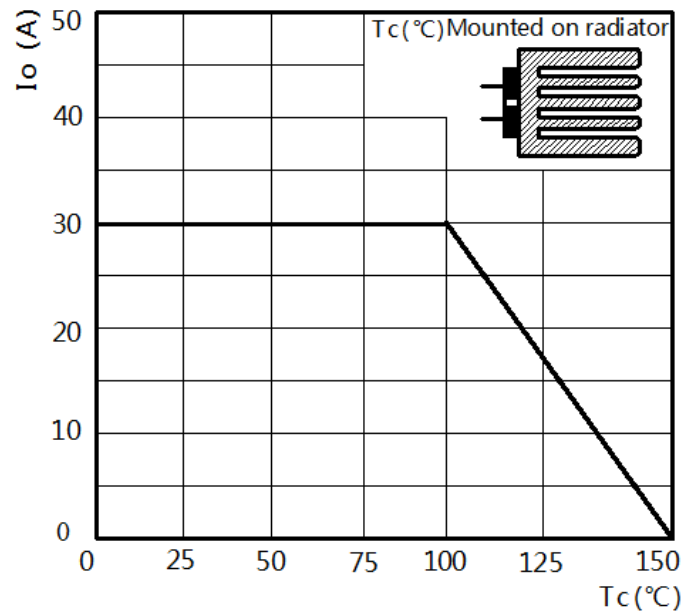
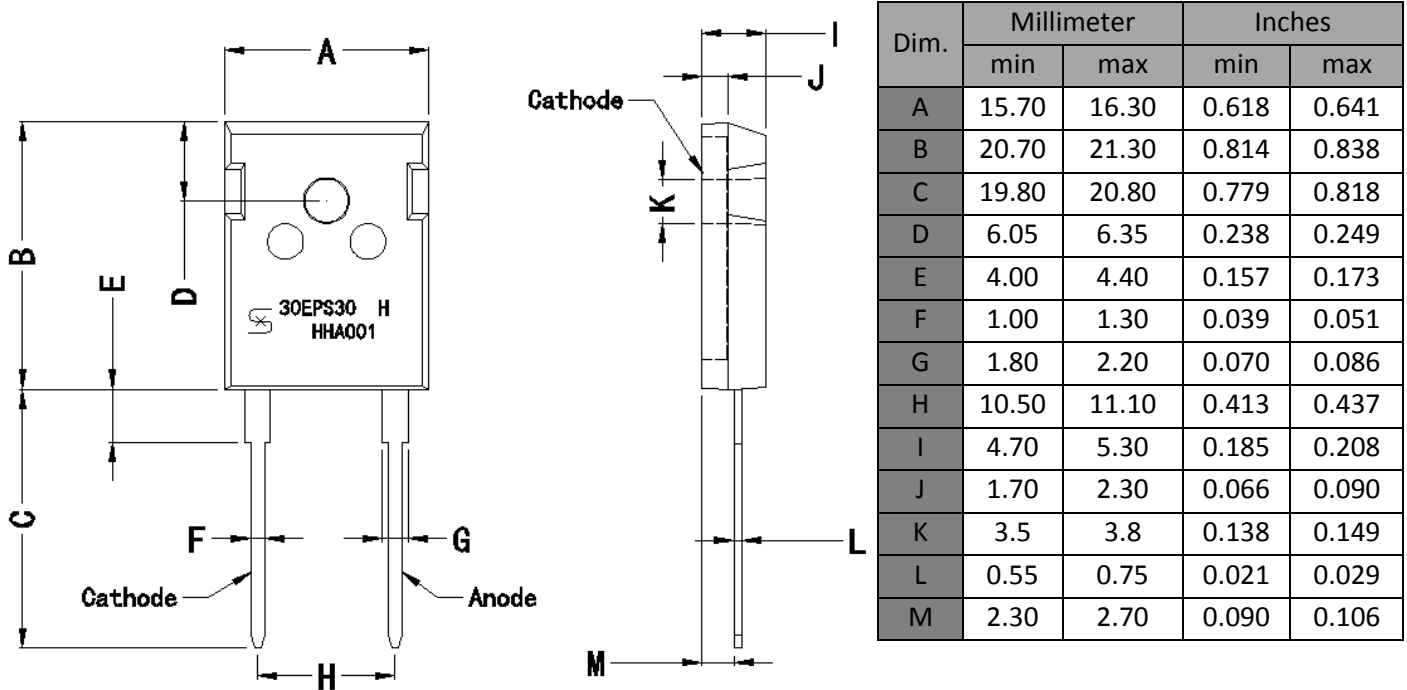


FIGURE 4. CURRENT DERATING CURVE

## Dimensioned drawing



## Marking

