GS6006P

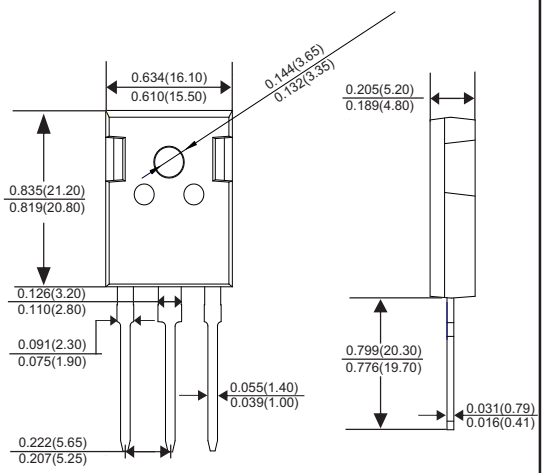
60A Low Forward Voltage Rectifier 650V

Features

- Plastic package has underwriters laboratories flammability classification 94V-0
- Glass passivated chip junction
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Low forward voltage

Package outline

TO-247AB



Dimensions in inches and (millimeters)

Mechanical data

- Case: TO-247AB, molded plastic over passivated junction
- Terminals: Solder plated, solderable per J-STD-002

Maximum ratings (AT T_A=25°C unless otherwise noted)

Parameter			GS6006P	Unit
Maximum repetitive peak reverse voltage		V_{RRM}	650	V
Maximum RMS voltage		V_{RMS}	455	V
Maximum DC blocking voltage		V_{DC}	650	V
Average forward current at T_C=100℃		$I_{F(AV)}$	60	A
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	600	A
Maximum forward voltage @ I_F=60A		V_F	1.0	V
Typical forward voltage @ I_F=10A		V_F	0.8	V
Maximum DC reverse current at rated DC blocking voltage	T_j=25℃	I_R	5.0	μA
	T_j=150℃		500	μA
Typical junction capacitance V_R=4.0V, f=1MHz		C_J	120	pF
Operating junction and storage temperature range		T_j,T_{stg}	-55 to +150	℃

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Rating and characteristic curves

FIG.1: Typical forward characteristics(25℃)

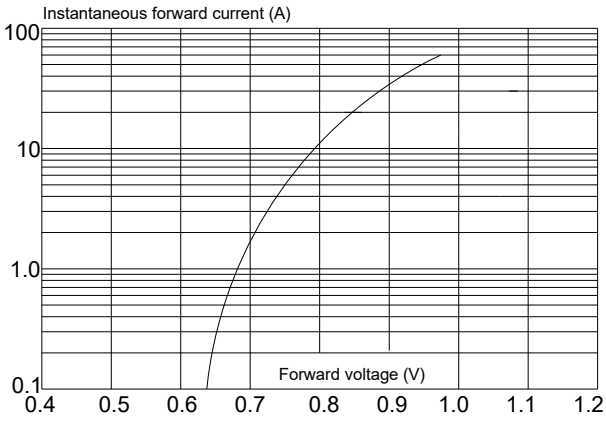


FIG.2: Typical reverse characteristics

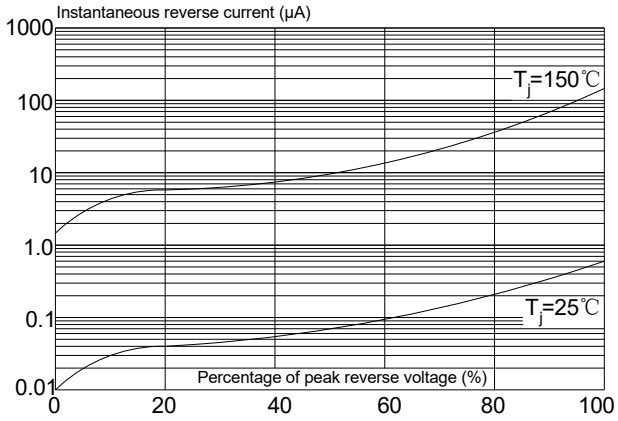


FIG.3: Maximum non-repetitive peak forward surge current

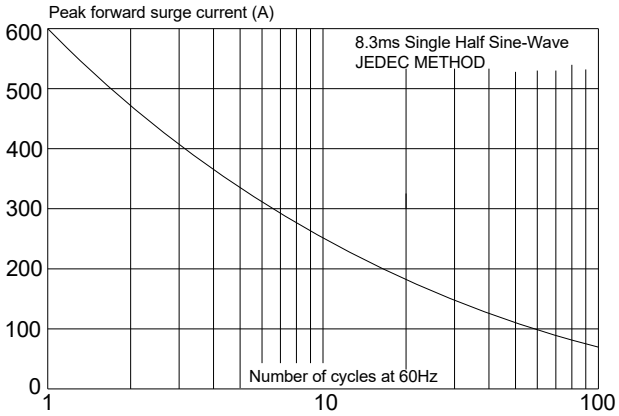
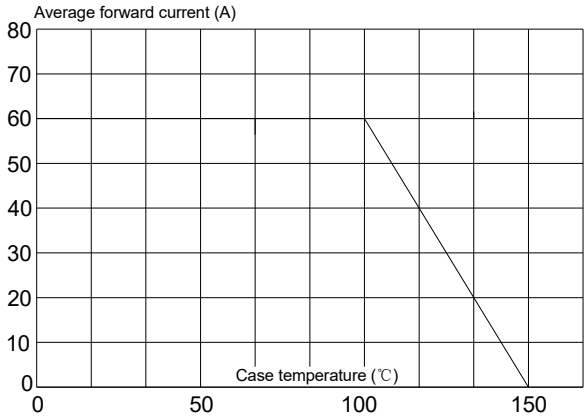


FIG.4: Forward current derating curve



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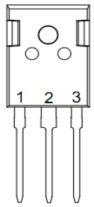
Pinning information

Pin	Simplified outline	Symbol
Pin1 no connection Pin2 cathode Pin3 anode		

Marking

Type number	Marking code
GS6006P	GS6006P