UGSP05JL

Ultra fast Plastic Power Rectifiers

VOLTAGE: 600V **CURRENT: 5.0A**

GULF SEMI

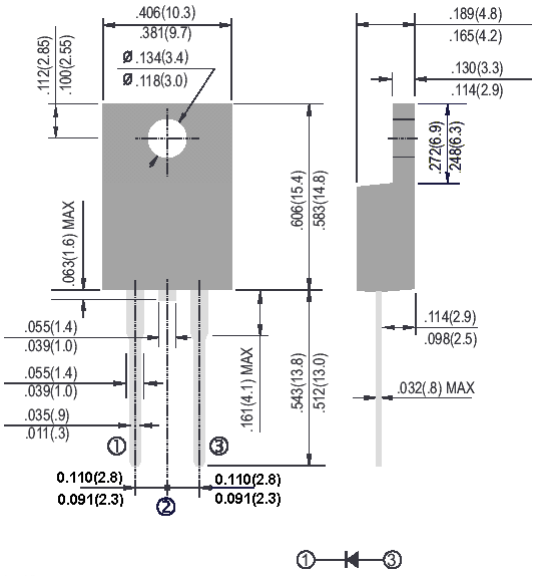
FEATURE

Plastic package has Underwriters Laboratories Flammability Classification 94V-0
Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
Ultra fast recovery time for high efficiency
Excellent high temperature switching
Glass passivated junction
High voltage and high reliability
High speed switching
Low forward voltage

MECHANICAL DATA

Case: JEDEC ITO-220AC molded plastic body over passivated chip
Terminals: Plated Insert leads, solderable per MIL-STD-750, Method 2026
Mounting Position: Any

ITO-220AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	UGSP05JL	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	V
Maximum RMS Voltage	Vrms	420	V
Maximum DC blocking Voltage	Vdc	600	V
Maximum Average Forward Rectified at Tc =100°C	If(av)	5.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	80	A
Maximum Forward Voltage at rated Forward Current	Vf	1.25	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	Ir	50 350	μA
Maximum Reverse Recovery Time (Note 1)	Trr	32	nS
Typical thermal resistance junction to case	Rth(jc)	5.0	℃/W
Storage and Operating Temperature Range	Tstg, Tj	-55 to +150	°C

Note:
Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A

RATINGS AND CHARACTERISTIC CURVES UGSP05JL

FIG. 1 -FORWARD CURRENT DERATING CURVE

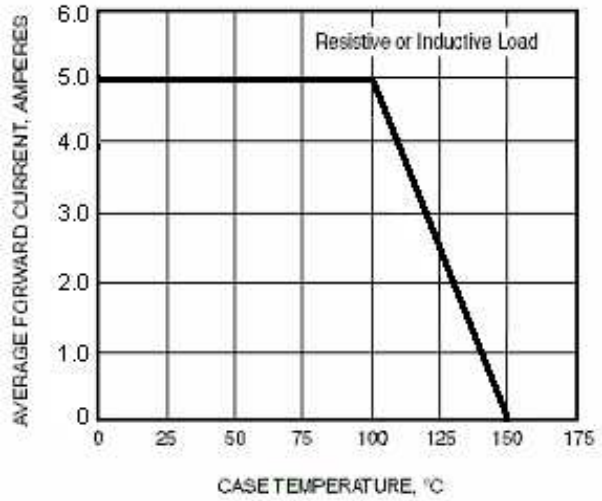


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

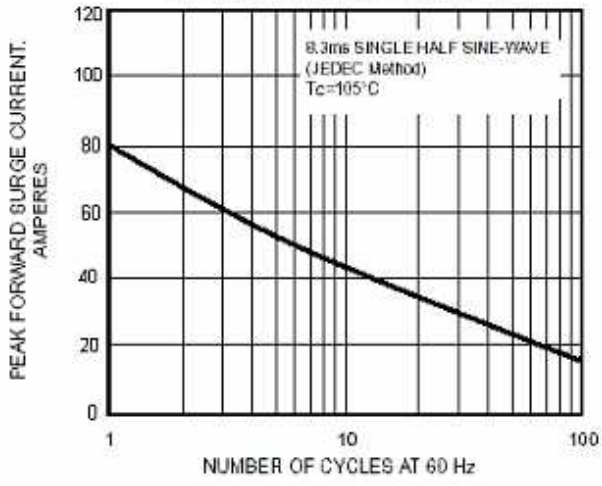


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

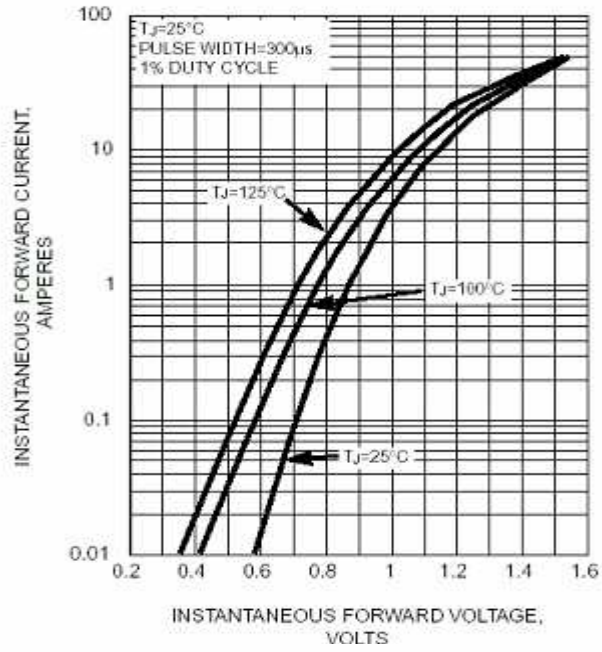


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

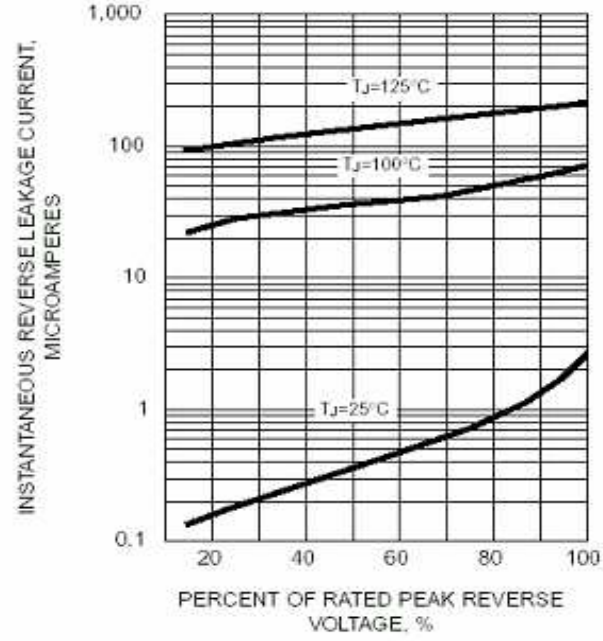


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG