



UGP30AH THRU UGP30KH

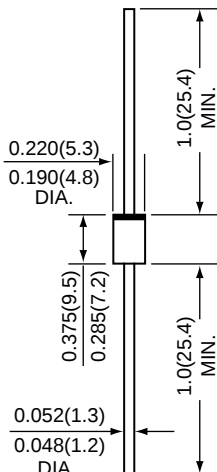
SINTERED GLASS PASSIVATED JUNCTION ULTRAFAST EFFICIENT RECTIFIER

Reverse Voltage - 50 to 800 Volts

Forward Current - 3.0 Amperes

PATENTED

DO-201AD



*Dimensions in inches and (millimeters)

SUPEREX IITM



FEATURES

- * Halogen-free type
- * GPRC (Glass Passivated Rectifier Chip) inside
- * Glass passivated cavity-free junction
- * Ultrafast recovery time for high efficiency
- * Low forward voltage , high current capability
- * Low leakage current
- * High surge current capability
- * High temperature soldering guaranteed: 260°C/10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3 kg) tension
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0

MECHANICAL DATA

Case : JEDEC DO-201AD molded plastic over glass body

Terminals : Tin Plated, solderable per MIL-STD-750, Method 2026

Polarity : Color band denotes cathode end

Weight : 0.04 ounces , 1.12 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	UGP30						UNITS	
		AH	BH	DH	GH	JH	KH		
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	Volts	
Maximum RMS voltage	VRMS	35	70	140	280	420	560	Volts	
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	Volts	
Maximum average forward rectified current 0.375" (9.5mm) lead length (SEE FIG.1)	I (AV)	3.0						Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	125				115		Amps	
Maximum instantaneous forward voltage at 3.0 A	VF	0.95			1.25		1.7	2.2	Volts
Maximum DC reverse current at rated DC blocking voltage	IR	5 120						uA	
Maximum reverse recovery time (NOTE 1)	trr	35						nS	
Typical junction capacitance (NOTE 2)	CJ	35						pF	
Typical thermal resistance (NOTE 3)	R θJA	20						°C / W	
Operating junction and storage temperature range	TJ,TSTG	-65 to +175						°C	

NOTES : (1) Reverse recovery test condition : IF 0.5A, IR=1.0A, IRT=0.25A

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead lengths, P.C.B. mounted.

RATINGS AND CHARACTERISTIC CURVES UGP30AH THRU UGP30KH

FIG.1 - FORWARD CURRENT DERATING CURVE

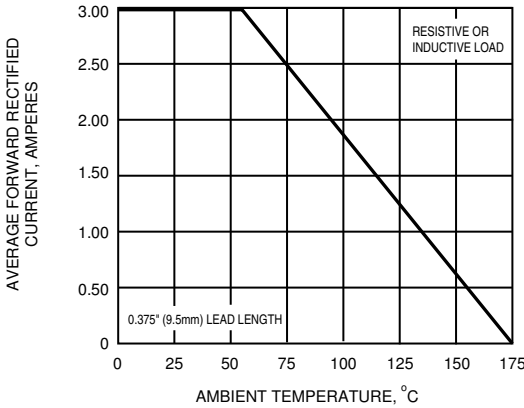


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

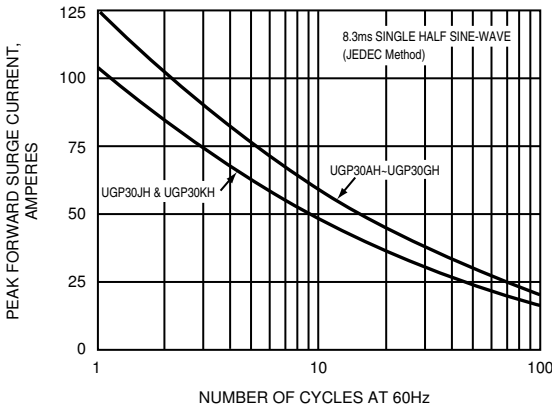


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

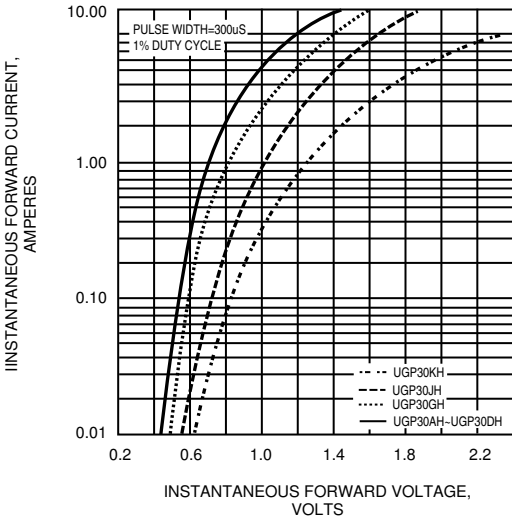


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

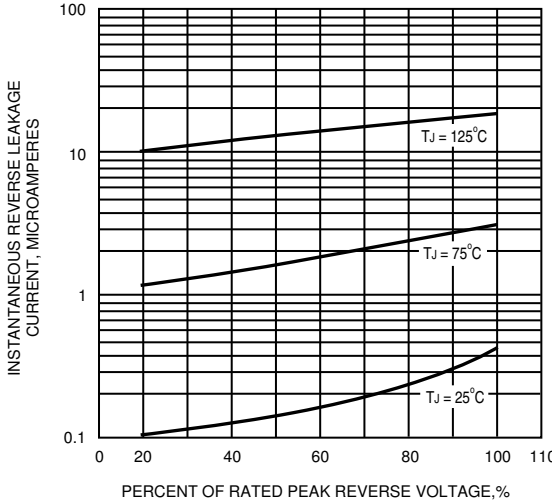


FIG.5 - TYPICAL JUNCTION CAPACITANCE

