GP30DLH THRU GP30MLH
Low VF Rectifier Diode

VF < 0.90V @IF = 3A

IFSM = 140Amp

FEATURES

* Halogen-free type
* GPRC (Glass passivated rectifier chip) inside
* Glass passivated cavity-free junction
* Compliance to RoHS product
* Low forward voltage drop
* 3.0 Ampere operation at TA=55°C with no thermal runaway
* Plastic package has Underwriters Laboratory Flammability Classification 94V-0

APPLICATION

* General purpose rectification
* Surge absorption

MECHANICAL DATA

Case : DO-201AD molded plastic
Terminals : Tin Plated, solderable per MIL-STD-750, Method 2026.
Polarity : Color band denotes cathode end
Weight : 1.12 grams

PACKING

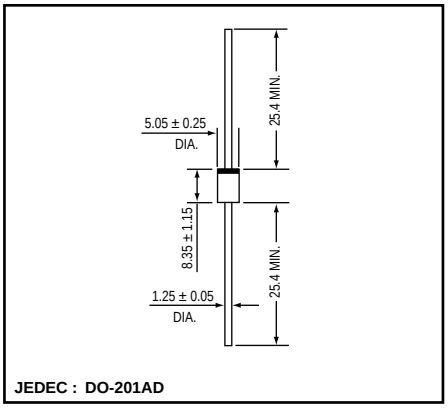
Bulk :
* 500 pieces box
* 24 boxes per (330x320x265mm) carton

Reel :
* 1,250 pieces per reel
* 4 reels per (340x340x330mm) carton

OUTLINE DIMENSIONS

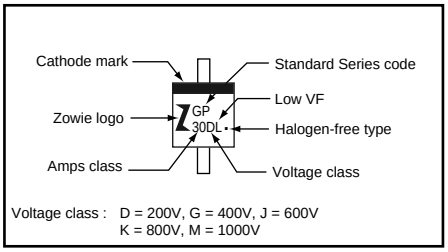
Case : DO-201AD

Unit : mm



JEDEC : DO-201AD

MARKING



Voltage class : D = 200V, G = 400V, J = 600V
K = 800V, M = 1000V

Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Rating					Unit
		GP30DLH	*GP30GLH*	*GP30JLH*	*GP30KLH*	*GP30MLH*	
Repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Average forward current	$I_{F(AV)}$	3.0					A
Peak forward surge current (8.3ms single half sine-wave)	I_{FSM}	140					
Operating junction temperature Range	T_j	-65 to +175					°C
Storage temperature Range	T_{STG}	-65 to +175					

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Type	Min.	Typ.	Max.	Unit
Forward voltage	V_F	I_F = 3.0A	*GP30DLH* *GP30GLH* *GP30JLH*	-	0.87	0.90	V
			GP30KLH *GP30MLH*	-	0.90	0.92	
Repetitive peak reverse current	I_{RRM}	V_R = Max. V_{RRM} , Ta = 25 °C		-	0.08	5	uA
Junction capacitance	C_j	V_R = 4V, f = 1.0 MHz		-	40	-	pF
Thermal resistance	$R_{th(JA)}$	Junction to ambient *		-	20	-	°C/W
	$R_{th(JL)}$	Junction to lead *		-	10	-	

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

FIG.1 - FORWARD CURRENT DERATING CURVE

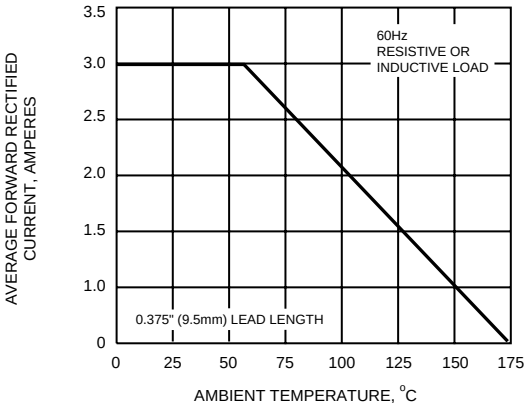


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

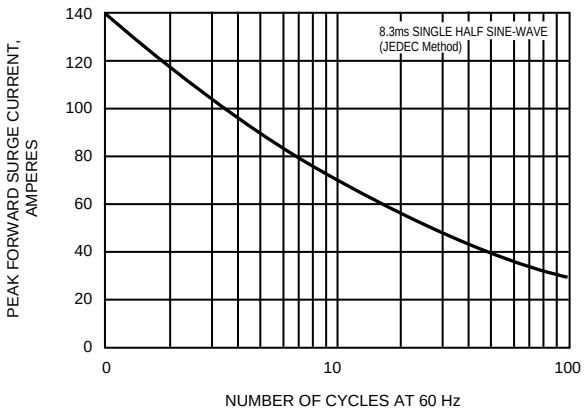


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

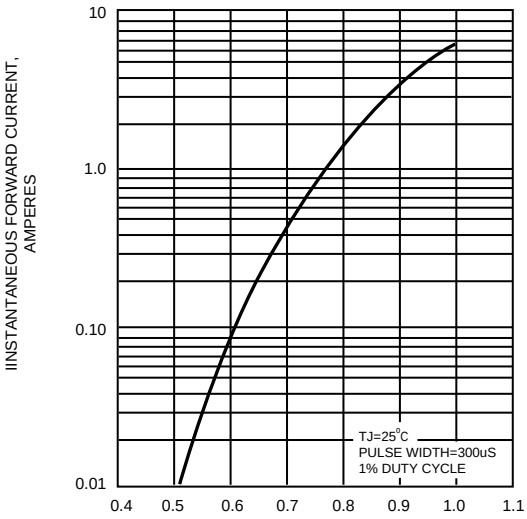


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

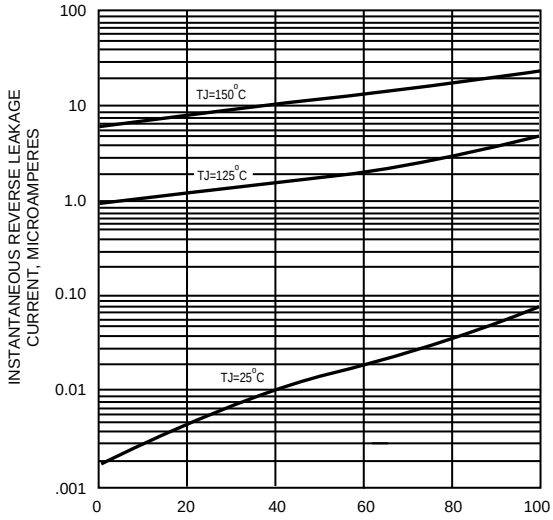


FIG.5 - TYPICAL JUNCTION CAPACITANCE

