

**GP30DL THRU GP30ML**  
**Low VF Rectifier Diode**

● **FEATURES**

- \* 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

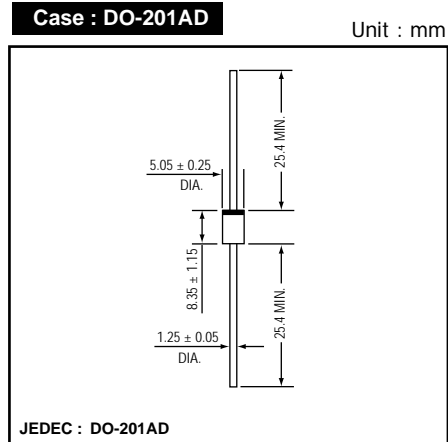
● **PACKING**

- Bulk :**
- \* 500 pieces box
  - \* 24 boxes per (330x320x265mm) carton
- Reel :**
- \* 1,250 pieces per reel
  - \* 4 reels per (340x340x330mm) carton

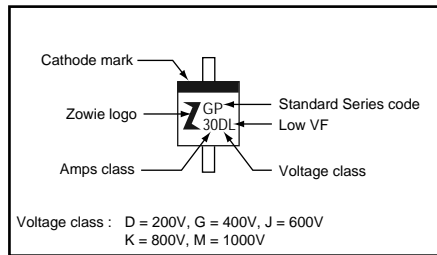
**VF < 0.90V @IF = 3A**

**IFSM = 140Amp**

● **OUTLINE DIMENSIONS**



● **MARKING**



**Absolute Maximum Ratings (Ta = 25 °C)**

ITEM	Symbol	Rating					Unit
		GP30DL	GP30GL	GP30JL	GP30KL	GP30ML	
Repetitive peak reverse voltage	VRRM	200	400	600	800	1000	V
Average forward current	IF(AV)	3.0					A
Peak forward surge current (8.3ms single half sine-wave)	IFSM	140					
Operating junction temperature Range	Tj	-65 to +175					°C
Storage temperature Range	TSTG	-65 to +175					

**Electrical characteristics (Ta = 25 °C)**

ITEM	Symbol	Conditions	Type	Min.	Typ.	Max.	Unit
Forward voltage	VF	IF = 3.0A	GP30DL	-	0.87	0.90	V
			GP30GL				
			GP30JL				
			GP30KL	-	0.90	0.92	
			GP30ML				
Repetitive peak reverse current	IRRM	VR = Max. VRRM , Ta = 25 °C		-	0.08	5	uA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz		-	40	-	pF
Thermal resistance	Rth(JA)	Junction to ambient *		-	20	-	°C/W
	Rth(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

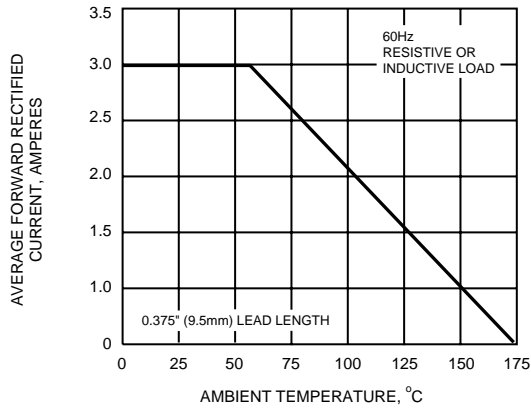


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

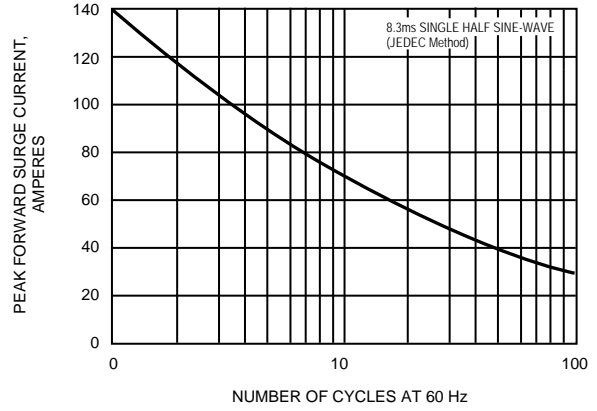


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

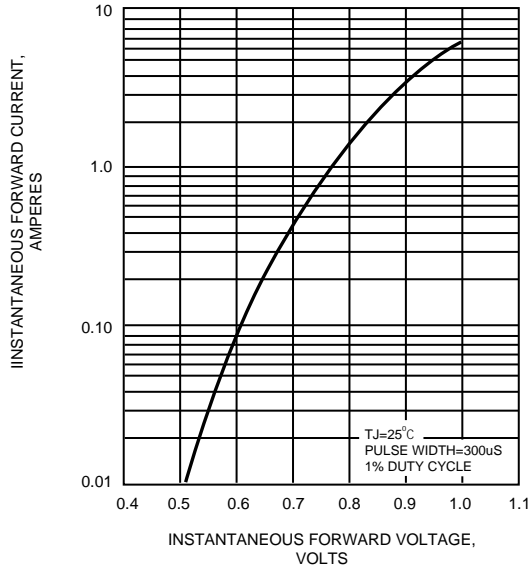


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

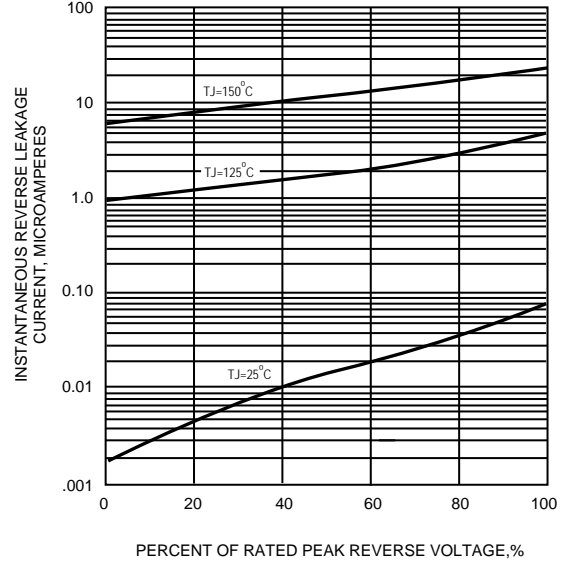


FIG.5 - TYPICAL JUNCTION CAPACITANCE

