

GF30DL THRU GF30ML

● **FEATURES**

- * Compliance to RoHS product
- * GPRC (glass passivated rectifier chip) inside
- * Glass passivated cavity-free junction
- * Ideal for surface mount automotive applications
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0

● **APPLICATION**

- * General purpose rectification of power supplies and inverters.
- * Surge absorption.

● **MECHANICAL DATA**

Case : DO-214AA molded plastic
Terminals : Tin Plated, solderable per MIL-STD-750, Method 2026.
Polarity : Color band denotes cathode end
Weight : 0.12 gram

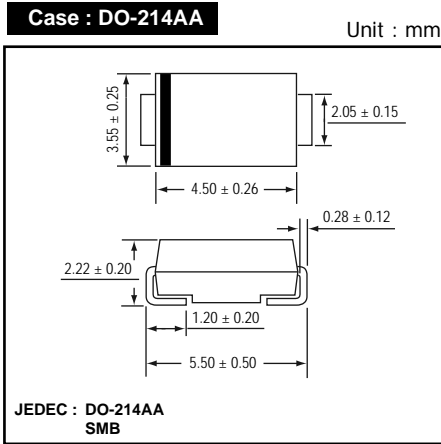
● **PACKING**

- 7" (178mm ± 2mm) reel :**
- * 850 pieces per reel
 - * 4 reels per box
 - * 6 boxes per carton
- 13" (330mm ± 2mm) reel :**
- * 3,000 pieces per reel
 - * 2 reels per box
 - * 5 boxes per carton

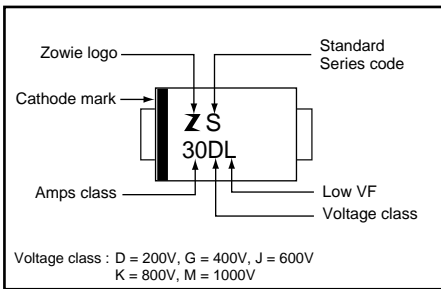
VF < 0.91V @IF = 3A

IFSM = 140Amp

● **OUTLINE DIMENSIONS**



● **MARKING**



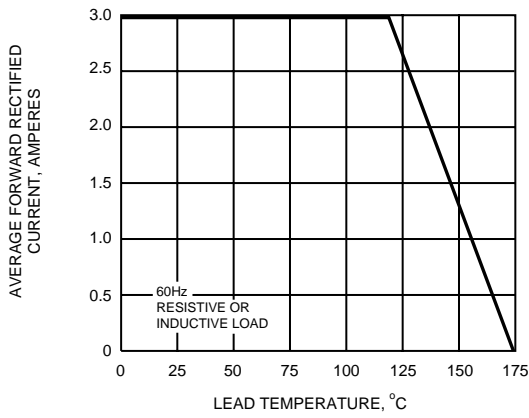
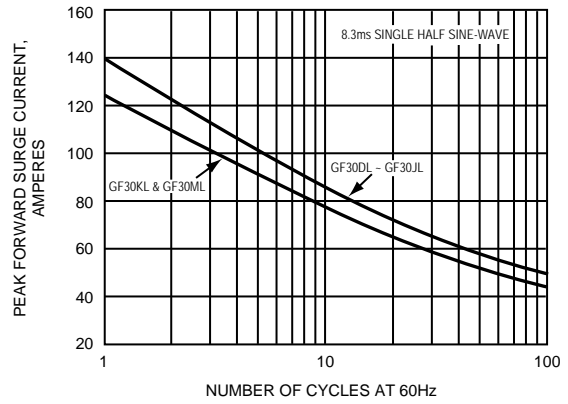
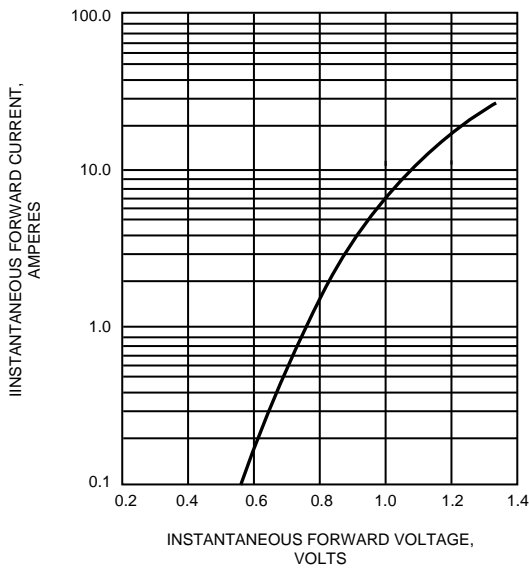
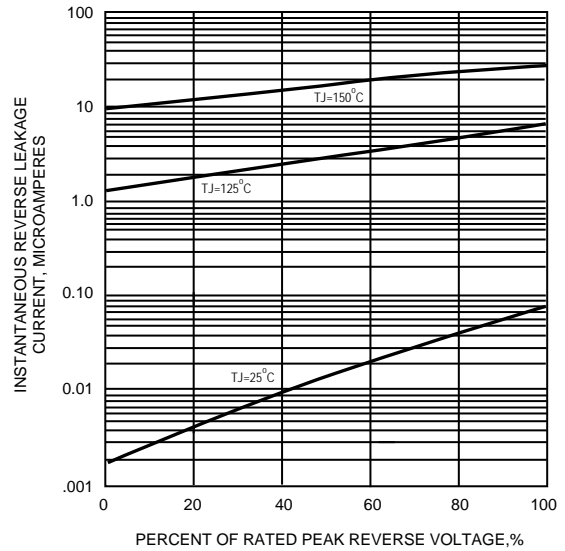
Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Rating					Unit
		GF30DL	GF30GL	GF30JL	GF30KL	GF30ML	
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		125			
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 = 3.0	GF30DL	-	0.88	0.91	V
			GF20GL				
			GF30JL				
			GF30KL				
			GF30ML				
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 *		-	47	-	°C/W
	Rth(JL)	Junction to lead *		-	13	-	

* Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2 x 0.2" (5.0mm x 5.0mm) copper pad areas.

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
