



GF10AH THRU GF10YH

SURFACE MOUNT GLASS PASSIVATED JUNCTION RECTIFIER

Reverse Voltage - 50 to 1600 Volts

Forward Current - 1.0 Ampere

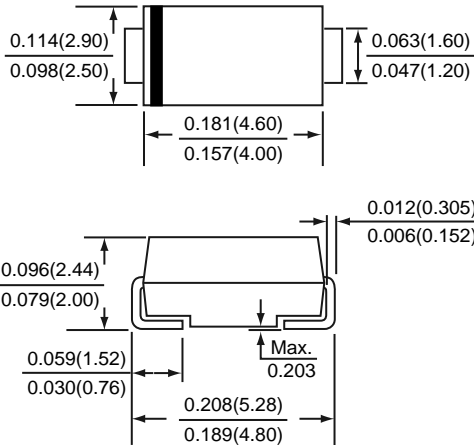
PATENTED

SMA/DO-214AC



FEATURES

- * Halogen-free type
- * GPRC (Glass Passivated Rectifier Chip) inside
- * Glass passivated cavity-free junction
- * Ideal for surface mount automotive applications
- * Built-in strain relief
- * Easy pick and place
- * High temperature soldering guaranteed: 260°C/10 seconds, at terminals
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0



*Dimensions in inches and (millimeters)

SUPEREX II™

MECHANICAL DATA

Case : JEDEC DO-214AC molded plastic over passivated chip

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

Polarity : Color band denotes cathode end

Weight : 0.002 ounces , 0.064 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	SYMBOLS	GF10										UNITS
		AH	BH	DH	GH	JH	KH	MH	QH	YH		
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	1200	1600		Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	840	1120		Volts
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	1200	1600		Volts
Maximum average forward rectified current (SEE FIG.1)	I (AV)	1.0										Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30										Amps
Maximum instantaneous forward voltage at 1.0 A	VF	1.0							1.25			Volts
Maximum DC reverse current at rated DC blocking voltage	IR					5 30 50			5 50 -			uA
Typical junction capacitance (NOTE 1)	CJ	12										pF
Typical thermal resistance (NOTE 2)	R θJA R θJL						56 14					°C / W
Operating junction and storage temperature range	TJ,TSTG	-65 to +175										°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

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

RATINGS AND CHARACTERISTIC CURVES GF10AH THRU GF10YH

FIG. 1 - FORWARD CURRENT DERATING CURVE

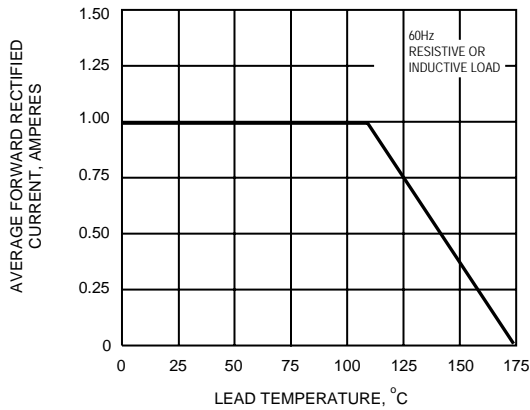


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

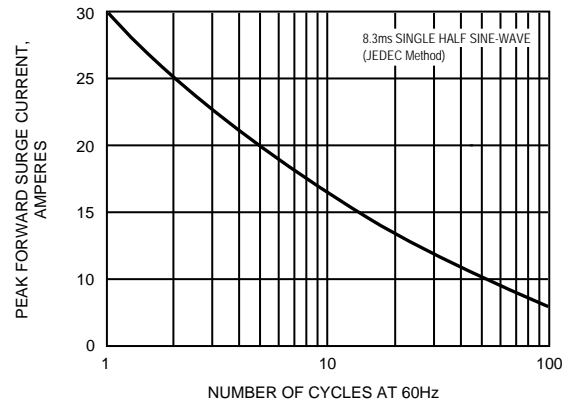


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

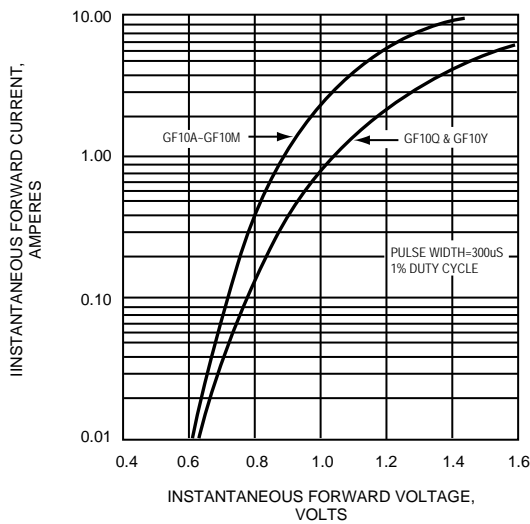


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

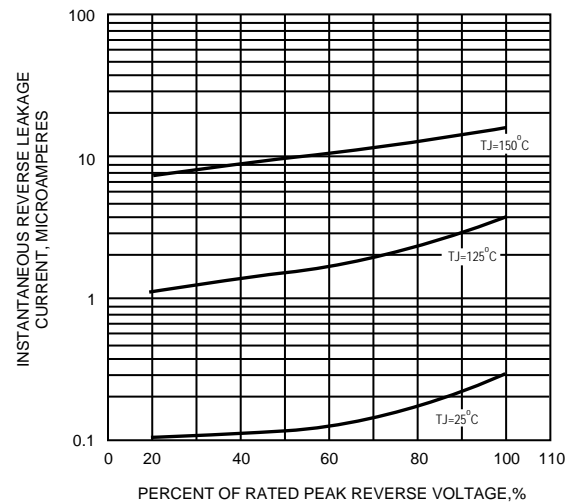


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

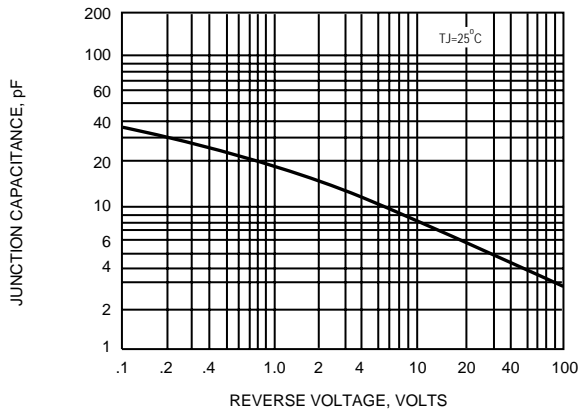


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

