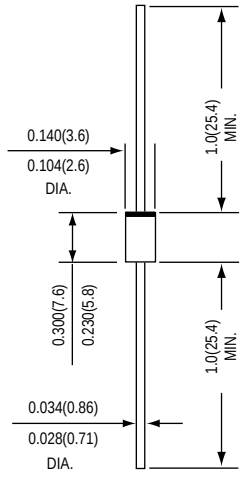
EGP20AH THRU EGP20MH

SINTERED GLASS PASSIVATED JUNCTION HIGH EFFICIENT RECTIFIER

Reverse Voltage - 50 to 1000 Volts *Forward Current - 2.0 Amperes*

PATENTED

DO-204AC



*Dimensions in inches and (millimeters)

SUPEREX II™



FEATURES

* Halogen-free type
* GPRC (Glass Passivated Rectifier Chip) inside
* Glass passivated cavity-free junction
* Superfast 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-204AC molded plastic over glass body
Terminals : Tin Plated, solderable per MIL-STD-750, Method 2026
Polarity : Color band denotes cathode end
Weight : 0.015 ounes , 0.4 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.	*SYMBOLS*	*EGP20*							*UNITS*
		AH	***BH***	***DH***	***GH***	***JH***	***KH***	***MH***	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length (SEE FIG.1)	I (AV)	2.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	65				60			Amps
Maximum instantaneous forward voltage at 2.0 A	V_F	1.0			1.25	1.7			Volts
Maximum DC reverse current at rated DC blocking voltage T_A=25°C T_A=125°C T_A=150°C	I_R	5 30 100				5 100 -			uA
Maximum reverse recovery time (NOTE 1)	trr	50				75			nS
Typical junction capacitance (NOTE 2)	C_J	45							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$ $R_{\theta JL}$	40 15							°C / W
Operating junction and storage temperature range	T_J,T_{STG}	-65 to +175							°C

NOTES : (1) Reverse recovery test condition : I_F 0.5A, I_R=1.0A, Irr=0.25A
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
(3) Thermal resistance from junction to ambient lead at 0.375" (9.5mm) lead lengths, P.C.B. mounted.

RATINGS AND CHARACTERISTIC CURVES EGP20AH THRU EGP20MH

FIG.1 - FORWARD CURRENT DERATING CURVE

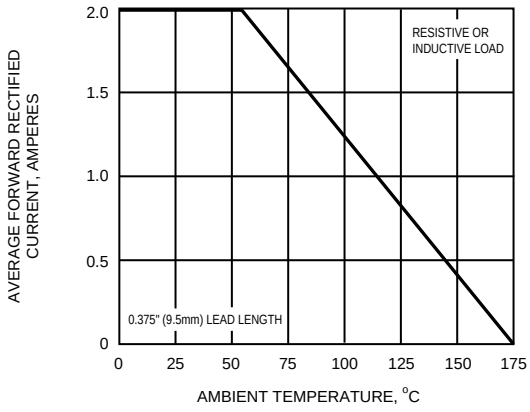


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

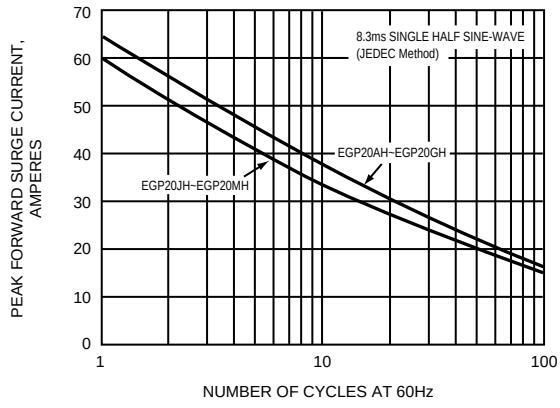


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

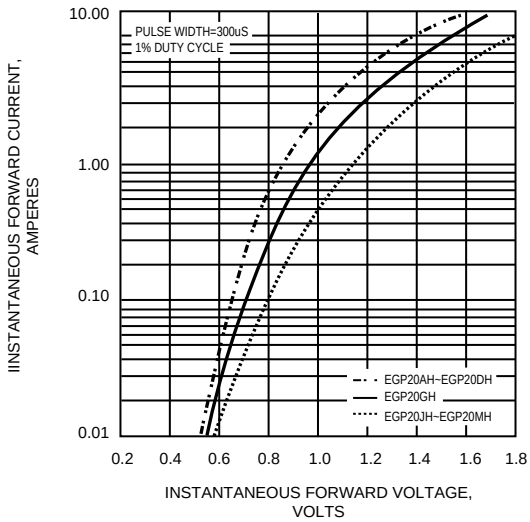


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

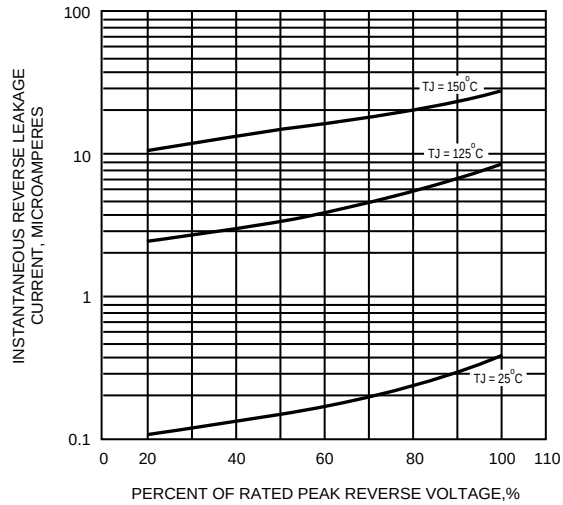


FIG.5 - TYPICAL JUNCTION CAPACITANCE

