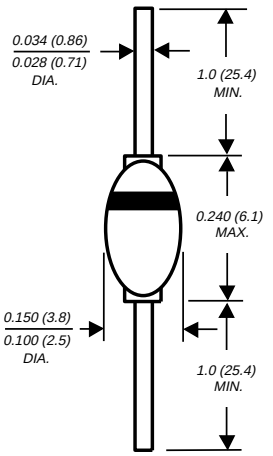
FE2A THRU FE2D

GLASS PASSIVATED FAST EFFICIENT RECTIFIER

Reverse Voltage - *50 to 200 Volts* ***Forward Current -*** *2.0 Amperes*

PATENTED*

DO-204AP

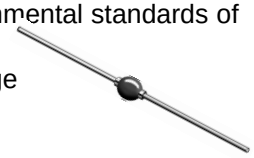


Dimensions in inches and (millimeters)

* *Brazed-lead assembly is covered by Patent No. 3,930,306*

FEATURES

- High temperature metallurgically bonded construction
- Glass passivated cavity-free junction
- Superfast recovery time for high efficiency
- Low forward voltage, high current capability
- Capable of meeting environmental standards of MIL-S-19500
- Hermetically sealed package
- Low leakage
- High surge capability
- High temperature soldering guaranteed: 350°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



MECHANICAL DATA

Case: JEDEC DO-204AP solid glass body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.002 ounce, 0.56 gram

MAXIMUM RATINGS AND MECHANICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	*FE2A*	*FE2B*	*FE2C*	*FE2D*	*UNITS*
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	35	70	105	140	Volts
Maximum DC blocking voltage	V_{DC}	50	100	150	200	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T_L=75°C	$I_{(AV)}$	2.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50.0				Amps
Maximum instantaneous forward voltage at 2.0A	V_F	0.95				Volts
Maximum DC reverse current at rated DC blocking voltage T_A=25°C T_A=100°C	I_R	2.0 50.0				µA
Maximum reverse recovery time (NOTE 1)	t_{rr}	35.0				ns
Typical junction capacitance (NOTE 2)	C_J	45.0				pF
Typical thermal resistance (NOTE 3, 4)	$R_{\Theta JA}$ $R_{\Theta JL}$	60.0 20.0				°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-65 to +175				°C

NOTES:
(1) Reverse recovery test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A
(2) Measured at 1.0 MH_Z and applied reverse voltage of 4.0 V_{DC}
(3) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length and mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads
(4) Thermal resistance from junction to lead at 0.375" (9.5mm) lead length with both leads attached to heatsinks

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RATINGS AND CHARACTERISTIC CURVES FE2A THRU FE2D

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

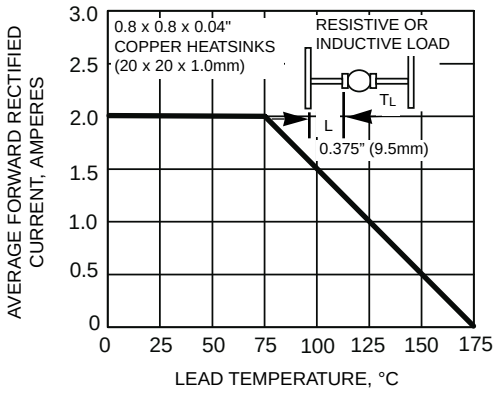


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

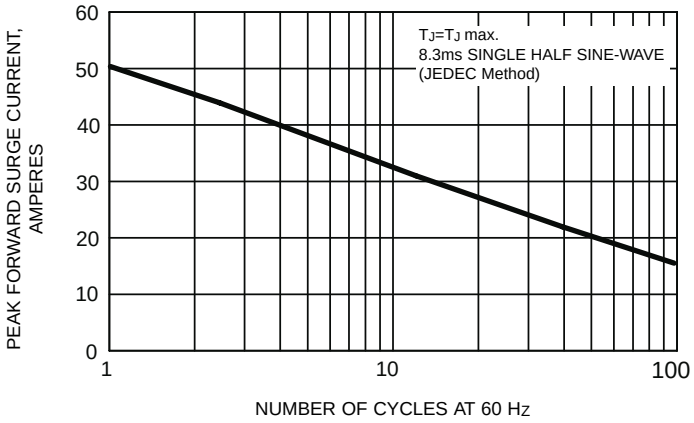


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

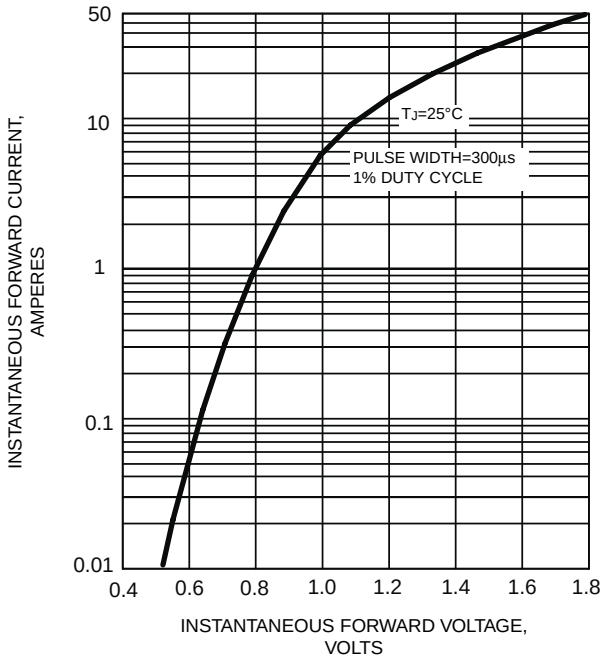


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

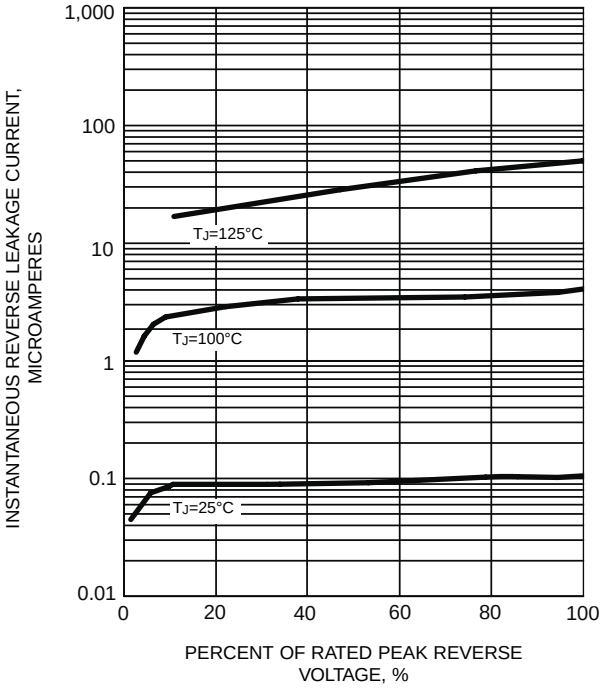
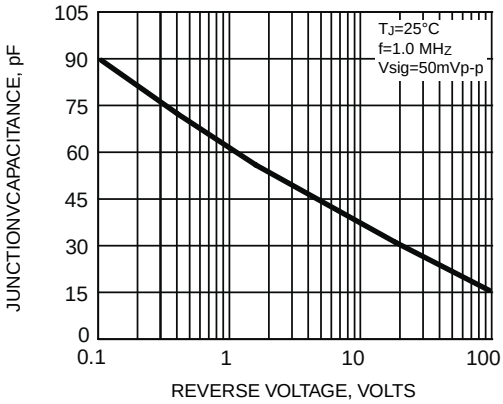


FIG. 5 - TYPICAL JUNCTION CAPACITANCE



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