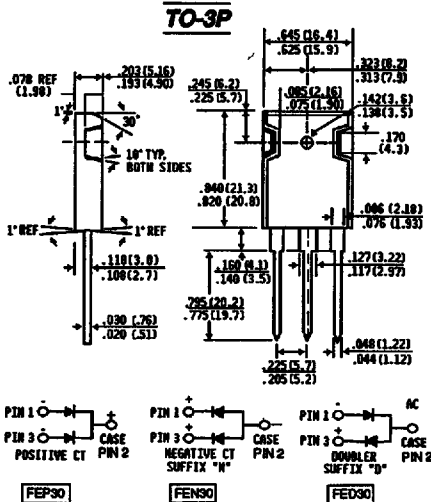
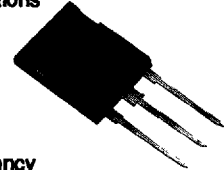


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FEP30AP THRU FEP30JP**FAST EFFICIENT GLASS PASSIVATED RECTIFIER****Voltage - 50 to 600 Volts Current - 30.0 Amperes****FEATURES**

- ◆ Dual rectifier construction, positive center tap
- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ Glass passivated chip junctions
- ◆ Superfast recovery times, high voltage
- ◆ Low forward voltage, high current capability
- ◆ Low thermal resistance
- ◆ Low power loss, high efficiency
- ◆ High temperature soldering guaranteed: 250°C., 17", (4.3mm) from case for 10 seconds



Dimensions in inches and (millimeters)

MECHANICAL DATA**Case:** JEDEC TO-3P molded plastic**Terminals:** Plated Lead solderable per MIL-STD-202, Method 208**Polarity:** As marked**Mounting Position:** Any**Weight:** 0.2 ounce, 5.6 gram**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

Resistive or inductive load.

For capacitive load, derate current by 20%.

		FEP SYMBOLS	FEP 30AP	FEP 30BP	FEP 30CP	FEP 30DP	FEP 30FP	FEP 30GP	FEP 30HP	FEP 30JP	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	150	200	300	400	500	600	Volts
Maximum RMS Voltage		VRMS	35	70	105	140	210	280	350	420	Volts
Maximum DC Blocking Voltage		VDC	50	100	150	200	300	400	500	600	Volts
Maximum Average Forward Rectified Current at TC=100°C		IAV)	30.0								Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	300.0								Amps
Maximum Instantaneous Forward Voltage per leg at 15.0A		VF	0.95				1.3		1.5		Volts
Maximum DC Reverse Current TC=25°C at Rated DC Blocking Voltage TC= 100°C		IR	10.0 500.0								µA
Maximum Reverse Recovery Time (NOTE 2) per leg TJ=25°C		TRR	35.0				50.0				nS
Typical Junction Capacitance per leg (NOTE 1)		CJ	175.0						145.0		pf
Typical Thermal Resistance (NOTE 3)		RθJC	1.0								°C/w
Operating and Storage Temperature Range		TJ,TSG	-65 to +150								°C

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, recover to 0.25A.
3. Thermal Resistance from Junction to Case per leg.

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RATINGS AND CHARACTERISTIC CURVES FEP30AP THRU FEP30JP

FIG. 1 — FORWARD CURRENT DERATING CURVE

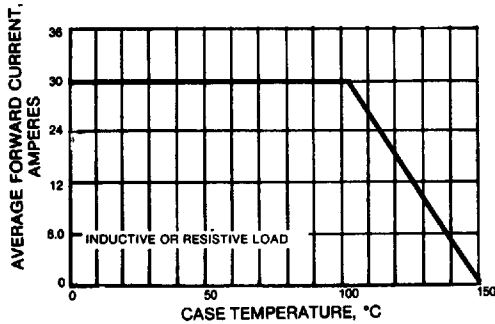


FIG. 2 — MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

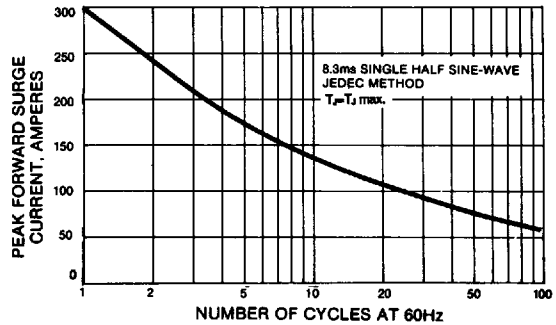


FIG. 3 — TYPICAL REVERSE CHARACTERISTICS PER LEG

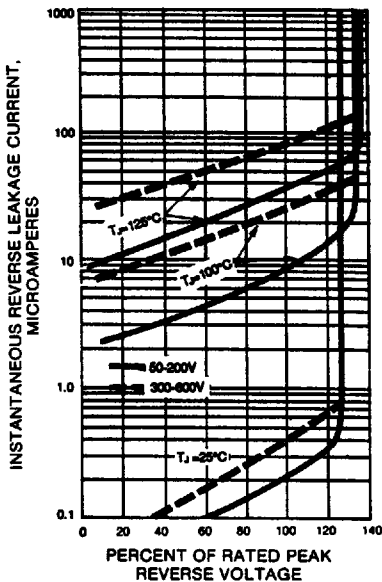


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

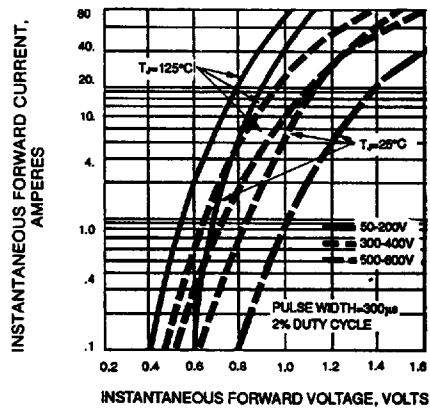


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

