FESA08D

Ultra fast Plastic Power Rectifiers

VOLTAGE: 200V **CURRENT: 8.0A**

GULF SEMI

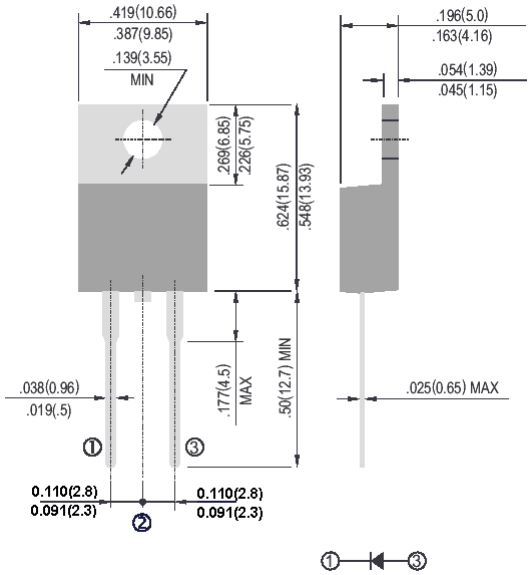
FEATURE

Plastic package has Underwriters Laboratories Flammability Classification 94V-0
Ideally suited for use in very high frequency switching power supplies, inverters and as free wheeling diodes
Ultra fast recovery time for high efficiency
Excellent high temperature switching
Glass passivated junction
High voltage and high reliability
High speed switching
Low forward voltage

MECHANICAL DATA

Case: JEDEC TO-220 molded plastic body over passivated chip
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any

TO-220AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	SYMBOL	FESA08D	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	200	V
Maximum RMS Voltage	Vrms	140	V
Maximum DC blocking Voltage	Vdc	200	V
Maximum Average Forward Rectified at Tc =100°C	If(av)	8.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	150	A
Maximum Forward Voltage at rated Forward Current and 25°C	Vf	1.0	V
Maximum Reverse Recovery Time (Note 1)	Trr	50	nS
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	5.0 200.0	μA
Typical thermal resistance junction to case	Rth(jc)	2.2	℃/W
Typical junction capacitance (Note 2)	Cj	80	pF
Storage and Operating Temperature range	Tstg, Tj	-55 to +150	°C

Note:
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc

RATINGS AND CHARACTERISTIC CURVES FESA08D

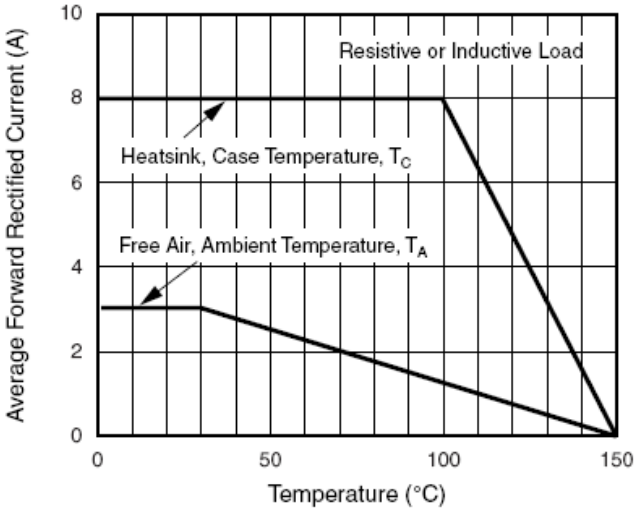


Figure 1. Maximum Forward Current Derating Curve

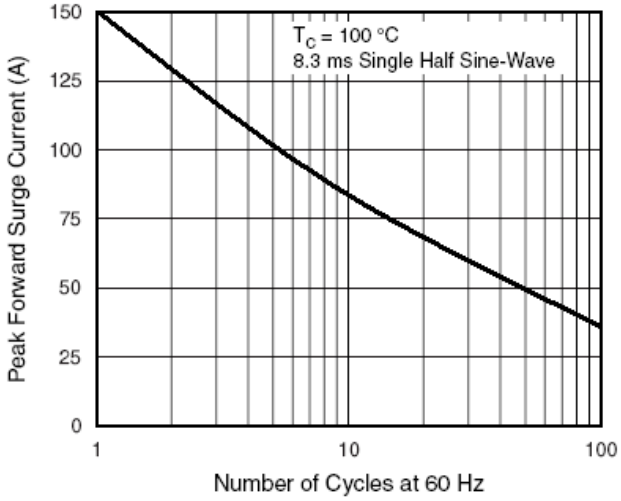


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

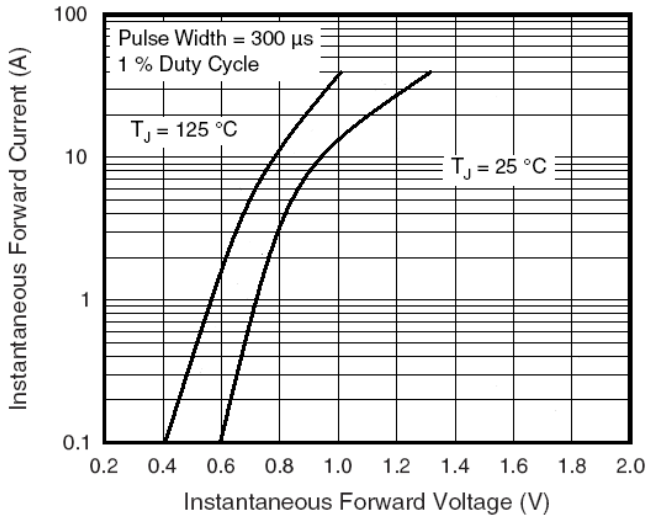


Figure 3. Typical Instantaneous Forward Characteristics

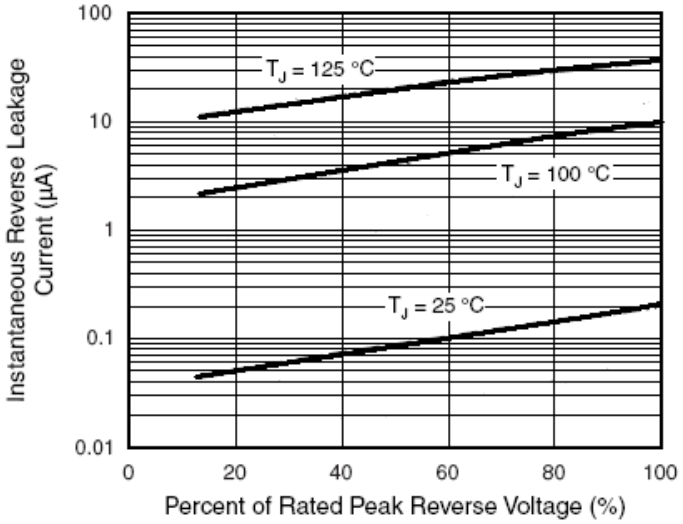


Figure 4. Typical Reverse Leakage Characteristics

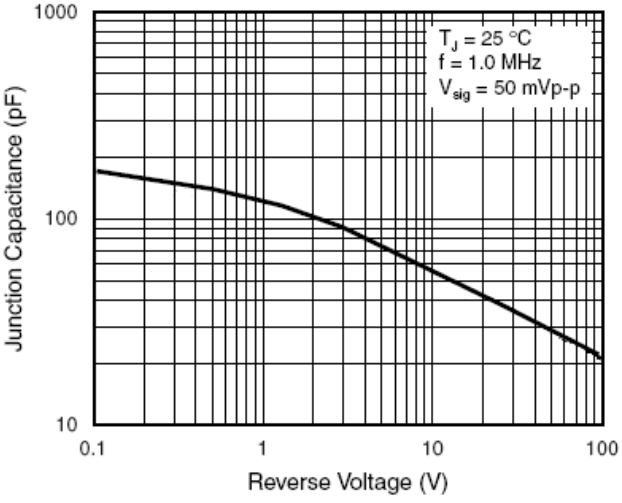


Figure 5. Typical Junction Capacitance