

FERA10G

Ultra fast Plastic Power Rectifiers

VOLTAGE: 400V

CURRENT:10.0A



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

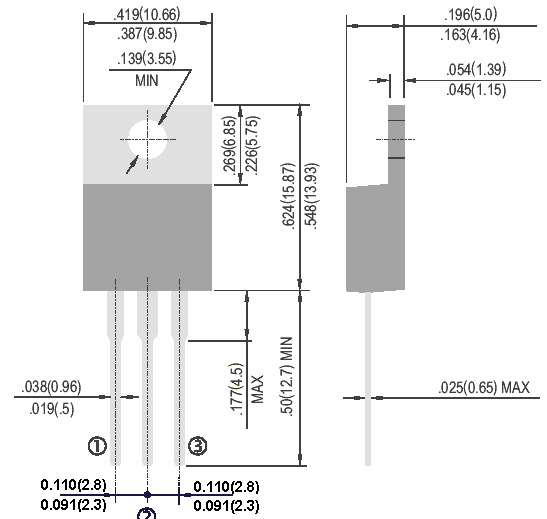
Case: JEDEC TO-220 molded plastic body over passivated chip

Terminals: Solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

TO-220AB



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	FERA10G	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	400	V
Maximum RMS Voltage	Vrms	280	V
Maximum DC blocking Voltage	Vdc	400	V
Maximum Average Forward Rectified at Tc =100°C	If(av)	10.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	150	A
Maximum Forward Voltage at Forward Current 5A and 25°C	Vf	1.30	V
Maximum DC Reverse Current Ta =25°C	Ir	10	μA
at rated DC blocking voltage Ta =125°C		100	
Maximum Reverse Recovery Time (Note 1)	Trr	50	nS
Typical thermal resistance junction to case	Rth(jc)	5.0	°C/W
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

RATINGS AND CHARACTERISTIC CURVES FERA10G

FIG. 1 - FORWARD CURRENT DERATING CURVE

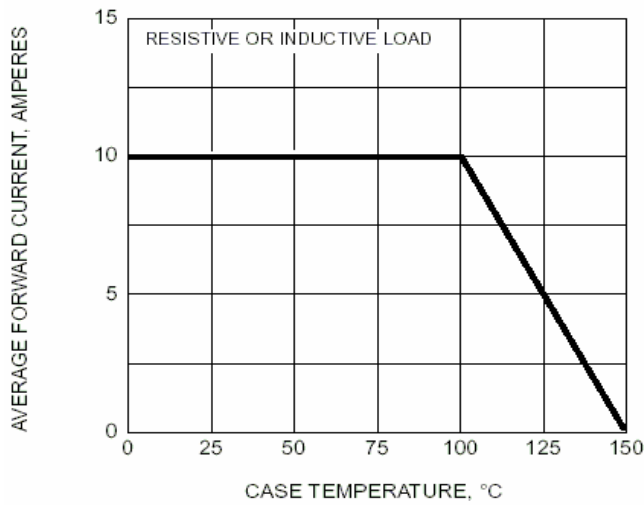


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

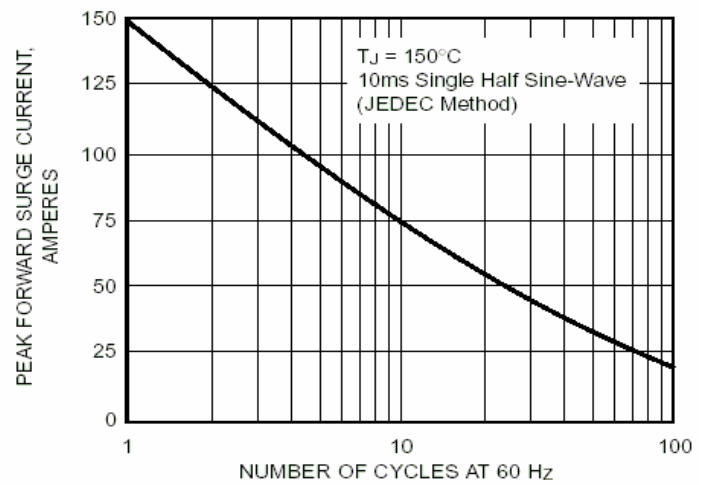


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

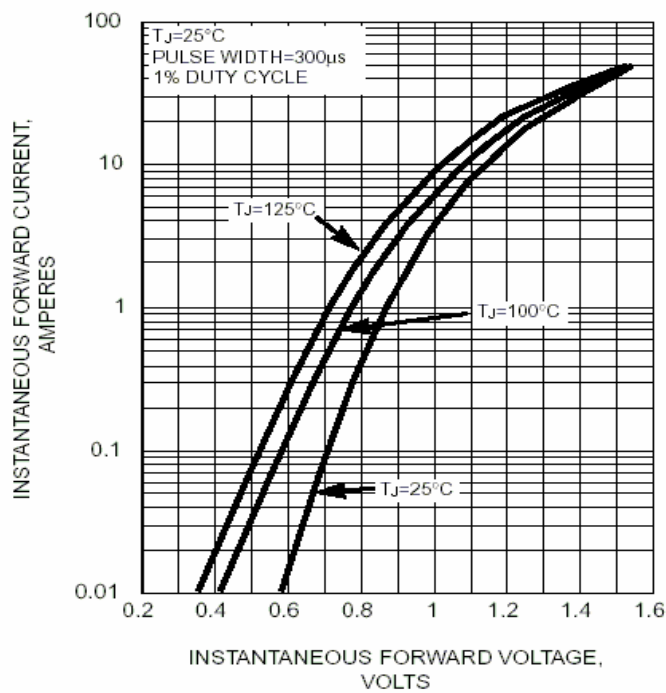


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

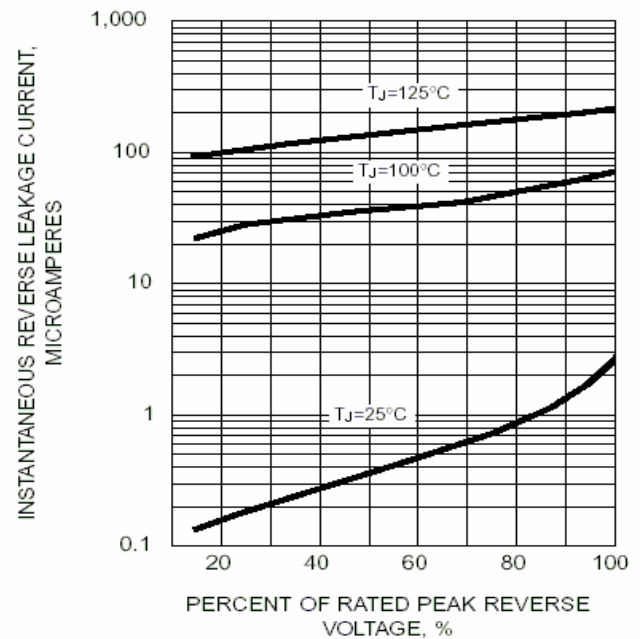


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

