

RESA08Q

Ultra fast Plastic Power Rectifiers

VOLTAGE: 1200V

CURRENT: 8.0A

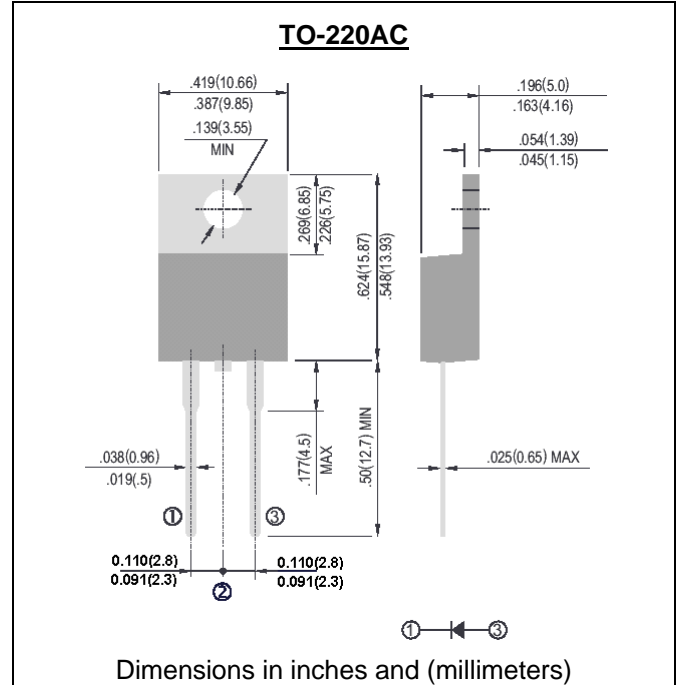


FEATURE

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: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	RESA08Q	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	1200	V
Maximum RMS Voltage	V _{rms}	840	V
Maximum DC blocking Voltage	V _{dc}	1200	V
Maximum Average Forward Rectified at T _c =100°C	I _{f(av)}	8.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	100	A
Maximum Forward Voltage at rated Forward Current and 25°C	V _f	2.3	V
Maximum DC Reverse Current T _a =25°C at rated DC blocking voltage T _a =125°C	I _r	10 200	μA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	75	nS
Typical thermal resistance junction to case	R _{th(jc)}	2.2	°C/W
Storage and Operating Temperature Range	T _{stg} , T _j	-55 to +150	°C

Note:

1. Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A

RATINGS AND CHARACTERISTIC CURVES RESA08Q

Fig. 1 – Maximum Forward Current Derating Curve

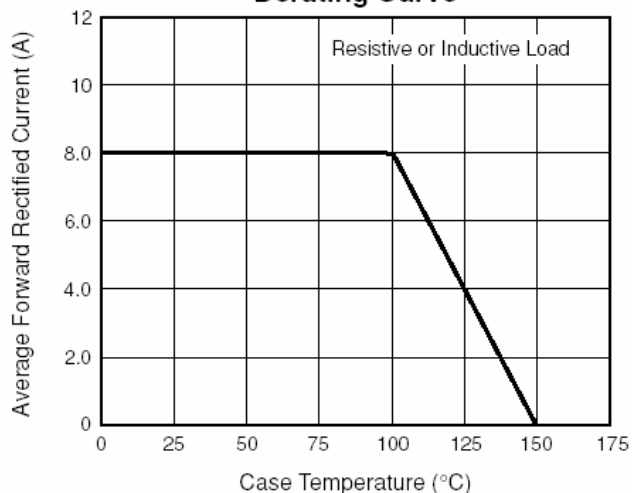


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

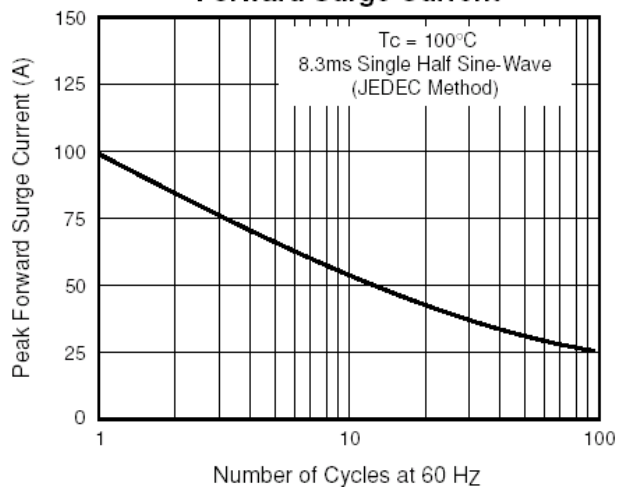


Fig. 3 – Typical Instantaneous Forward Characteristics Per Leg

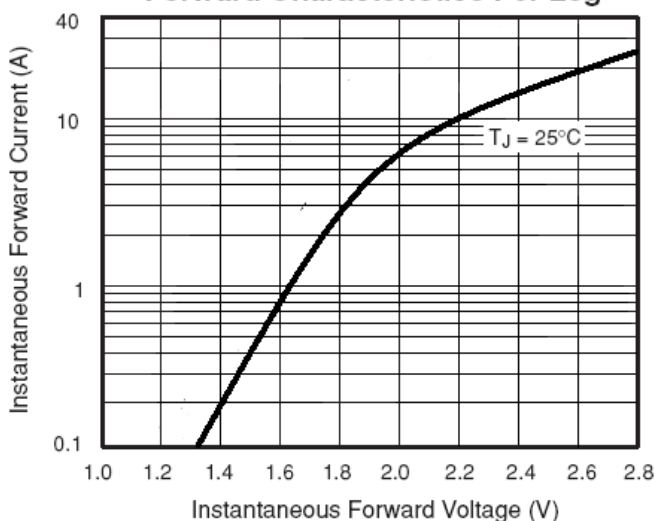


Figure 4. Typical Reverse Current

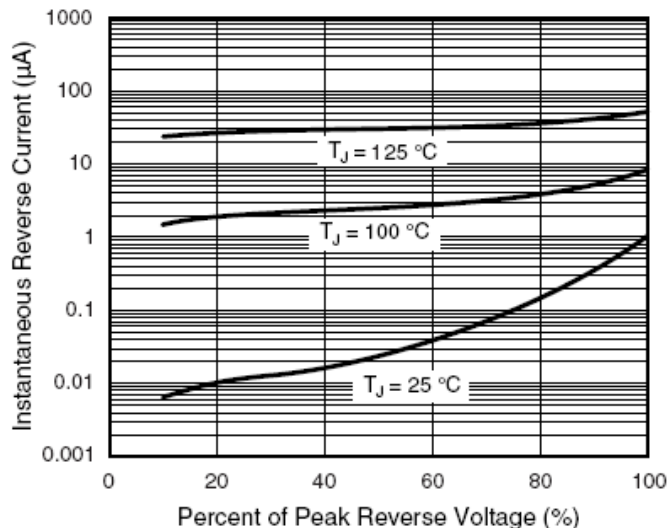


Fig.5 – Typical Junction Capacitance

