

8A01 THRU 8A07

GENERAL PURPOSE PLASTIC RECTIFIERS

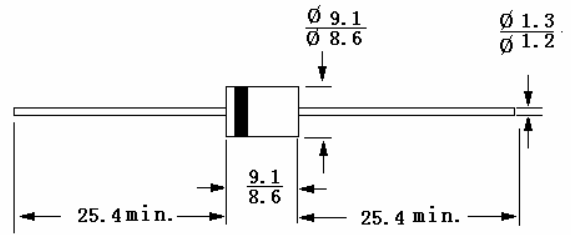
Reverse Voltage – 50 to 1000 Volts

Forward Current – 8.0 Amperes

R-6

Features

- Diffused junction
- High current capability and low forward voltage drop
- Surge overload rating to 600A peak
- Low reverse leakage current



Dimensions in mm

Mechanical Data

- **Case:** Molded plastic
- **Terminats:** Plated leads solderable per MIL-STD-202, Method 208
- **Polarity:** Cathode band
- **Mounting position:** Any

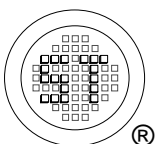
Absolute Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.. For capacitive load, derate current by 20%.

	Symbols	8A01	8A02	8A03	8A04	8A05	8A06	8A07	Units
Maximum peak repetitive reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum working peak reverse voltage	V_{RWM}	50	100	200	400	600	800	1000	Volts
Maximum DC blocking voltage	V_R	50	100	200	400	600	800	1000	Volts
Maximum RMS reverse voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	Volts
Maximum average rectified output current ⁽¹⁾ @ $T_A=50^\circ\text{C}$	I_O	8							Amps
Non-repetitive peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}								Amps
Maximum forward voltage @ $I_F=10\text{A}$	V_{FM}	1							Volts
Maximum peak reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	I_{RM}	10 100							μA μA
Typical junction capacitance ⁽²⁾	C_J	150				80			pF
Typical thermal resistance junction to ambient	$R_{\theta JA}$	10							K/W
Operating and Storage temperature range	T_J, T_S	-65 to +150							°C

Notes: 1. Loads maintained at ambient temperature at a distance of 9.5mm from the case.

2. Measured at 1MHz and applied reverse voltage of 4V DC



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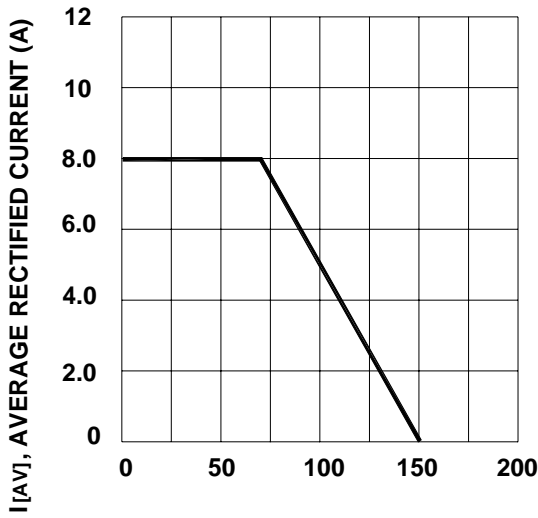
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Dated : 23/06/2003

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TA, AMBIENT TEMPERATURE (°C)
Fig.1 Forward Current Derating Curve

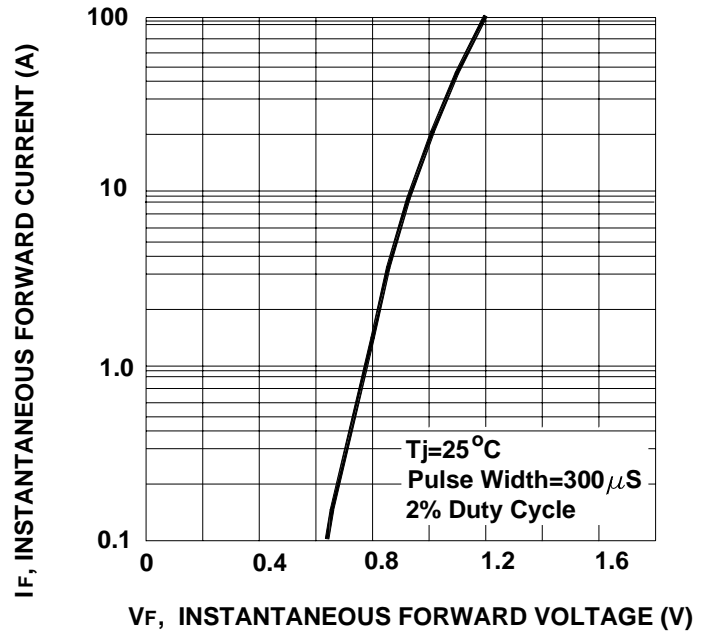


Fig.2 Typical Forward Characteristics

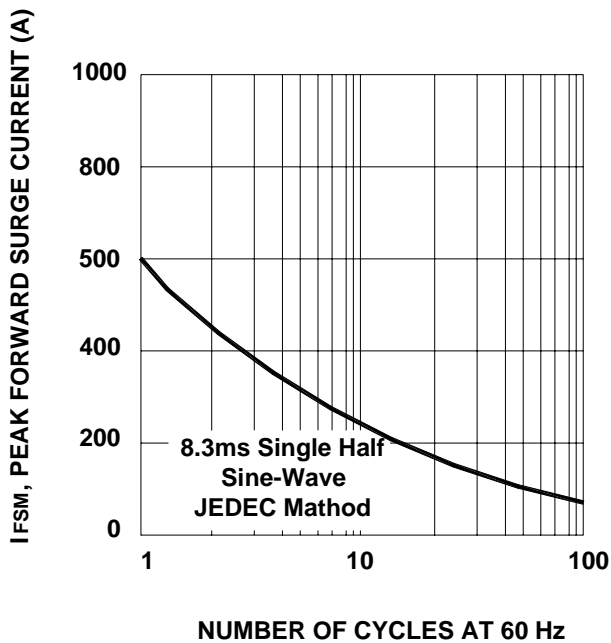


Fig.3 Maximum Non-Repetitive Peak Forward Surge Current

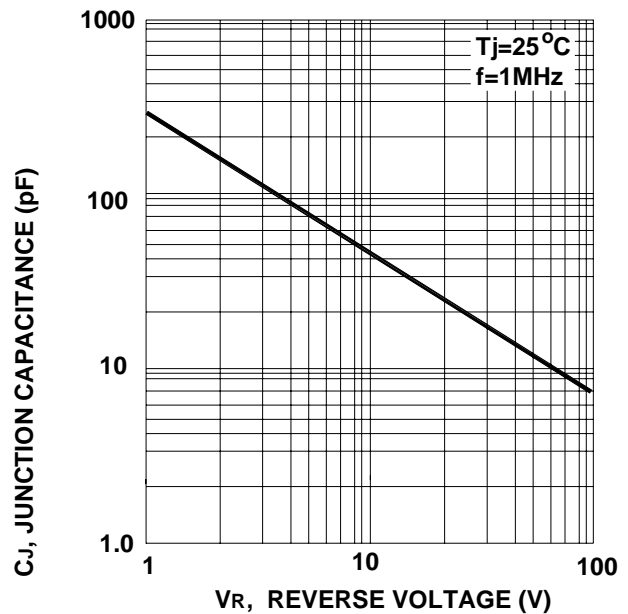
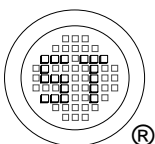


Fig.4 Typical Junction Capacitance



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