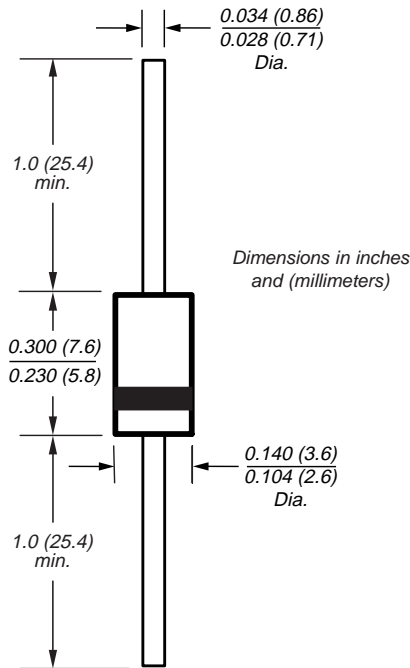
**Ultrafast Plastic Rectifier****DO-204AC (DO-15)****Reverse Voltage** 200V
Forward Current 1.0A
Reverse Recovery Time 25ns**Features**

- Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- Ideally suited for use in very high frequency switching power supplies, inverters and as a free wheeling diode
- Ultrafast recovery time for high efficiency
- Excellent high temperature switching
- Glass passivated junction

Mechanical Data**Case:** JEDEC DO-204AC, molded plastic body over passivated chip**Terminals:** Axial leads, solderable per MIL-STD-750, Method 2026High temperature soldering guaranteed:
250°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension**Polarity:** Color band denotes cathode end**Mounting Position:** Any**Weight:** 0.015 oz., 0.4 g**Maximum Ratings & Thermal Characteristics** Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	MUR120	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	200	V
Working peak reverse voltage	V_{RWM}	200	V
Maximum DC blocking voltage	V_{DC}	200	V
Maximum average forward rectified current at $T_A = 130^\circ\text{C}$	$I_{F(AV)}$	1.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35	A
Typical Thermal Resistance Junction to Ambient ⁽²⁾	$R_{\theta JA}$	27	°C/W
Operating and storage temperature range	T_J, T_{STG}	-65 to +175	°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Maximum instantaneous forward voltage ⁽¹⁾ at	1.0A, $T_J = 25^\circ\text{C}$ 1.0A, $T_J = 150^\circ\text{C}$	V_F	0.875 0.710	V
Maximum instantaneous reverse current at rated DC blocking voltage ⁽¹⁾	$T_J = 25^\circ\text{C}$ $T_J = 150^\circ\text{C}$	I_R	2.0 50	μA
Maximum reverse recovery time at $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$		t_{rr}	25	ns
Maximum reverse recovery time at $I_F = 1.0\text{A}$, $di/dt = 50\text{A}/\mu\text{s}$, $V_R = 30\text{V}$, $I_{rr} = 10\% I_{RM}$		t_{rr}	35	ns
Maximum forward recovery time at $I_F = 1.0\text{A}$, $di/dt = 100\text{A}/\mu\text{s}$, I_{rec} to 1.0V		t_{fr}	25	ns

Notes: (1) Pulse test: $t_p = 300\mu\text{s}$, duty cycle $\leq 2\%$

(2) Lead length = 3/8" on P.C. Board with 1.5" x 1.5" copper surface

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Fig. 1 – Forward Current Derating Curve

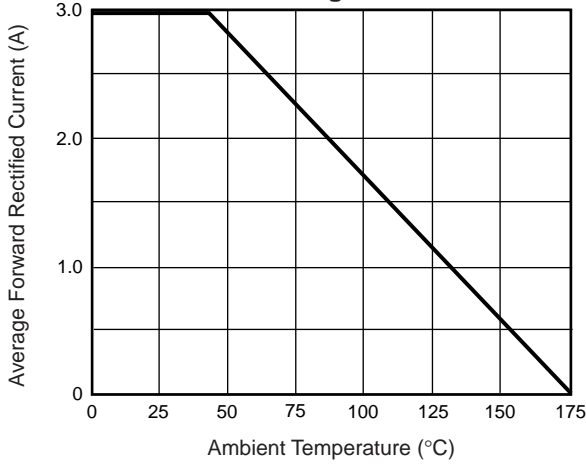


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

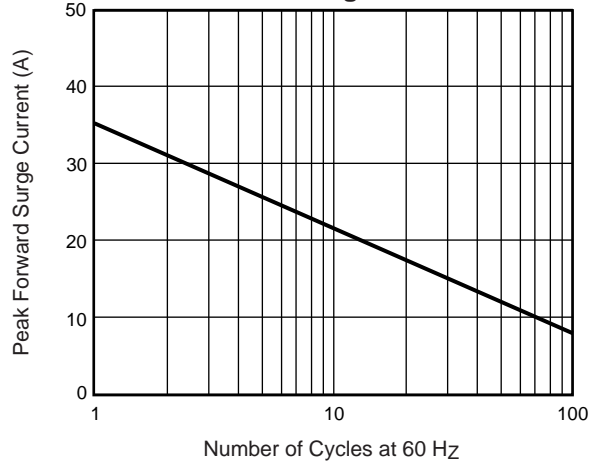


Fig. 3 – Typical Instantaneous Forward Characteristics

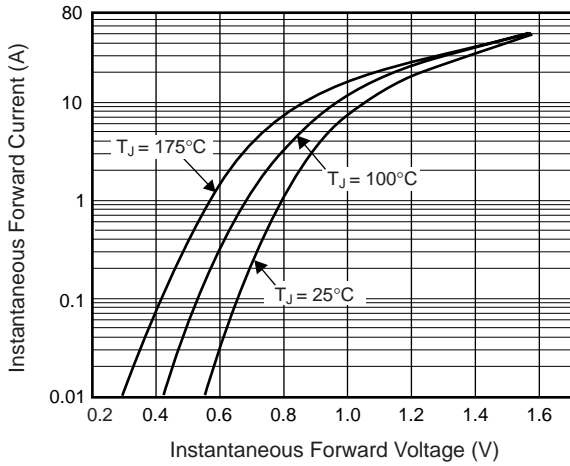


Fig. 4 – Typical Reverse Leakage Characteristics

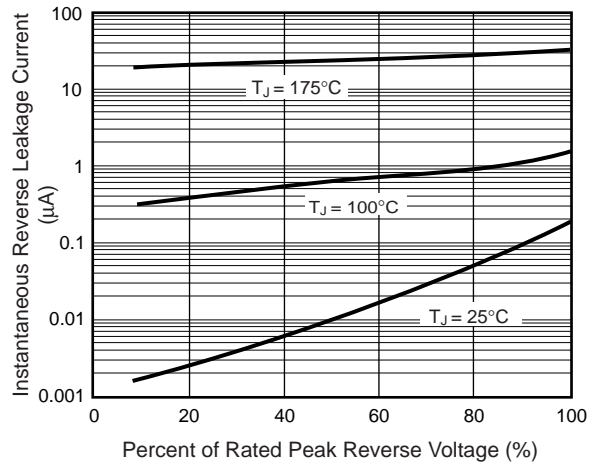


Fig. 5 – Typical Junction Capacitance

