

FR201-FR207

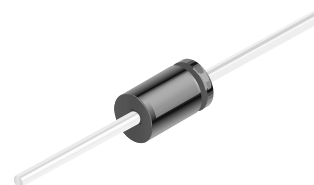
Fast Recovery Rectifiers

VOLTAGE RANGE: 50 --- 1000V

CURRENT: 2.0A

Features

- Fast switching for high efficiency
- Low cost
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0



DO-15

COLOR BAND DENOTES CATHODE

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

CHARACTERISTICS	SYMBOL	FR201	FR202	FR203	FR204	FR205	FR206	FR207	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T _A =50	I _(AV)	2.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I _{FSM}	70							A
Peak Forward Voltage at 2.0A DC	V _F	1.3							V
Maximum DC Reverse Current @T _J =25 at Rated DC Blocking Voltage @T _J =100	I _R	5.0 100							uA
Maximum Reverse Recovery Time(Note 1)	T _{RR}	150				250	500		ns
Typical Junction Capacitance (Note2)	C _J	30				20			pF
Typical Thermal Resistance (Note3)	R _{JA}	25							/W
Operating Temperature Range	T _J	-50 to +125							
Storage Temperature Range	T _{STG}	-50 to +150							

NOTES: 1.Measured with I_F=0.5A,I_R=1A,I_{RR}=0.25A

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

3.Thermal resistance junction of ambient.

Ratings AND Characteristic Curves

FIG. 1 – FORWARD CURRENT DERATING CURVE

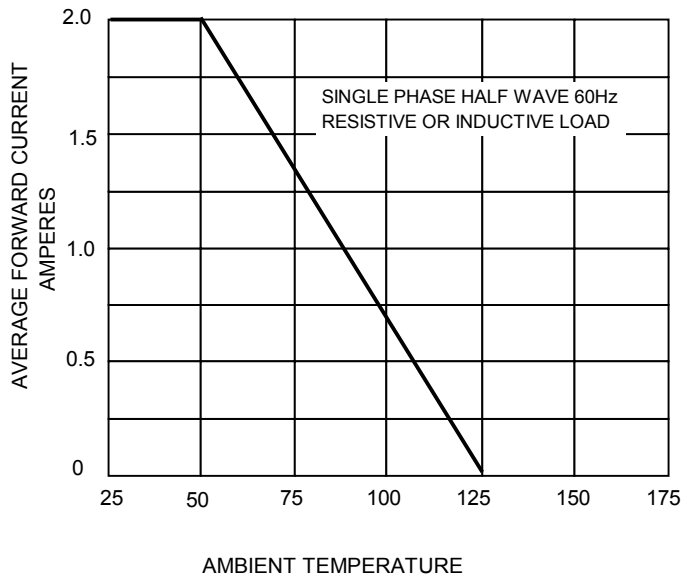


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

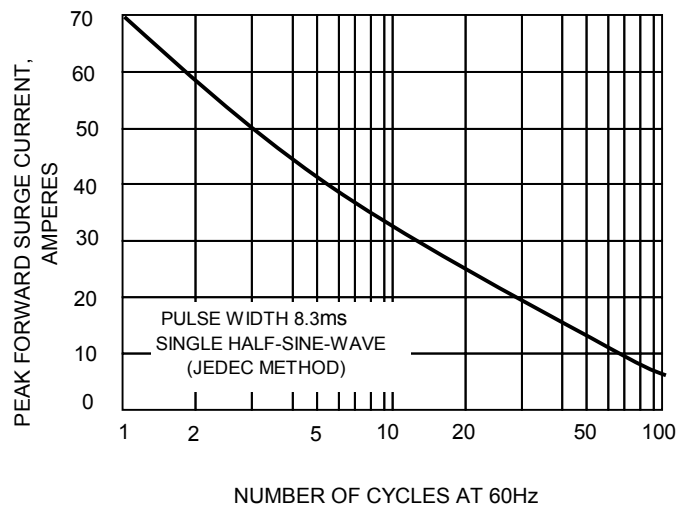


FIG.3 – TYPICAL JUNCTION CAPACITANCE

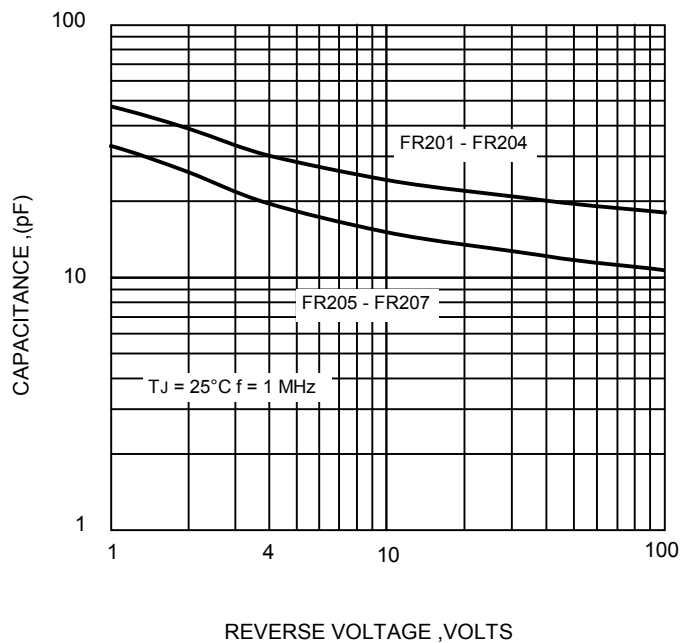


FIG.4-TYPICAL FORWARD CHARACTERISTICS

