

SF301 THRU SF306

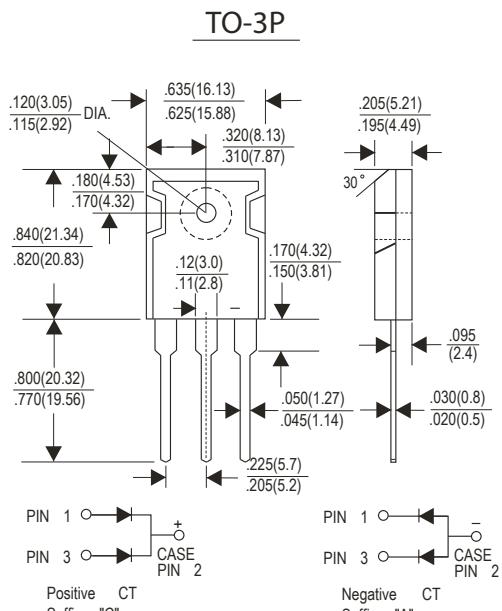
CURRENT 30.0 Amperes
VOLTAGE 50 to 400 Volts

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Super fast recovery time
- Good for use in switching mode circuits
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

Mechanical Data

- Case : JEDEC TO-3P molded plastic body
- Terminals : Lead solderable per MIL-STD-750, method 2026
- Polarity : As marked
- Mounting Position : Any
- Weight : 0.2 ounce, 5.60 gram



Dimensions in inches and (millimeters)

Maximum Ratings And Electrical Characteristics

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

	Symbols	SF301	SF302	SF303	SF304	SF305	SF306	Units			
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	150	200	300	400	Volts			
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	Volts			
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	Volts			
Maximum average forward rectified current at T _c =100 °C	I _(AV)	30.0						Amps			
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	250						Amps			
Maximum instantaneous forward voltage at 15.0A	V _F	0.95			1.30			Volts			
Maximum DC reverse current at rated DC blocking voltage	I _R	10						µA			
T _c =25 °C		500									
T _c =100 °C											
Maximum reverse recovery time (Note 1) T _j =25 °C	T _{rr}	35						ns			
Typical junction capacitance (Note 2)	C _J	175						pF			
Operating junction and storage temperature range	T _J T _{STG}	-55 to +150						°C			

Notes:

(1) Test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.

(2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.

