

## Super Fast Rectifiers

### SF3060P

#### FEATURES

\* Plastic package has Underwriters Laboratory Flammability

Classification 94V-0

\* Dual rectifier construction, positive center-tap

\* Planar chip construction

\* Low forward voltage, high current high current capability

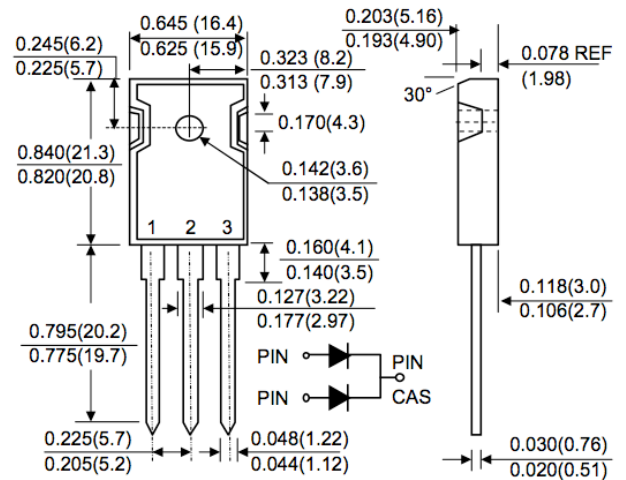
\* Low thermal resistance, low power loss

\* High temperature soldering guaranteed:

250 °C, 0.1"(4.06mm) from case for 10 seconds

Pb / RoHS Free

## TO-247AD (TO-3P)



#### MECHANICAL DATA

Case: TO-247AD

Molding compound meets UL 94 V-0 flammability

RoHS compliant, and commercial grade

Terminals: Matte tin plated leads, solderable per J-STD-002

and JESD 22-B102

Polarity: As marked

#### Maximum Ratings (Tc=25°C unless otherwise noted)

Parameter	Symbol	SF3060P	Unit
Maximum repetitive peak reverse voltage	VRRM	600	V
Working peak reverse voltage	VRWM	420	V
Maximum DC blocking voltage	VDC	600	V
Maximum average forward rectified current TA=100°C	IF(AV)	30	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	300	A
Junction Capacitance	Cj	145	pF
Operating junction temperature range	TJ	-55 to +150	°C
Storage temperature range	TSTG	-55 to +175	°C

**Electrical characteristics (Tc=25°C unless otherwise noted)**

Parameter	Symbol	Value		Unit
		Typical	Max	
Instantaneous forward voltage per diode at IF=15A, TA=25°C	VF	2.3	2.5	V
Maximum reverse current Tj=25°C at working peak reverse voltage Tj=125°C	IR	10.0		uA
		500		uA
Reverse Recovery Time IF=0.5A, IR=1A, Irr=0.25A	Trr	35		ns

**Thermal characteristics (Tc=25°C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Typical thermal resistance	Rthja	1.2	°C/W

**Notes:**

- (1) Pulse test: 300 μs pulse width, 1 % duty cycle
- (2) Pulse test: Pulse width ≤ 40 ms
- (3) Cj Measured at 1.0MHz and reverse voltage of 4.0V DC.