

**Ultra Fast, High Power Rectifier****Fast Recovery Series****Features**

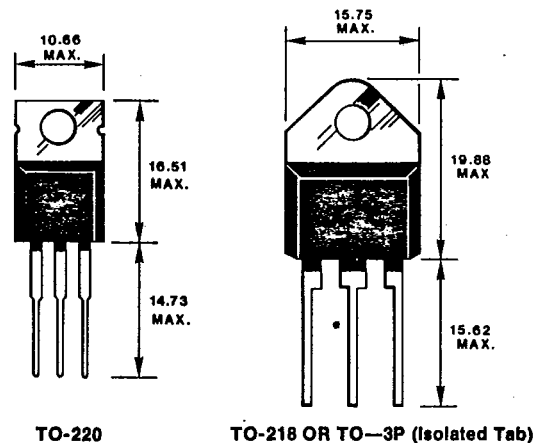
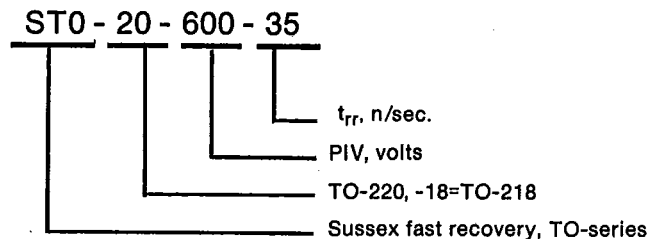
- 35 thru 200 n/sec recovery
- Reverse voltages from 50 to 600 volts
- Forward current ratings to 35 amps
- Low forward voltage
- Available in chip form

**Description**

This fast recovery series combines industry standard packaging with the Sussex manufactured line of high quality diodes.

Forward and reverse polarities are available for use in half-wave bridge applications, and packages other than the TO-220 or TO-218 can also be supplied.

All fast recovery diodes are tested 100% prior to encapsulation.

**Ordering Specifier****Maximum Ratings**

PARAMETER	Symbol	STO-20	STO-18	UNITS
Forward Current	$I_F$	16	35	Amps
Typ. Surge Current	$I_{FSM}$	300	700	Amps, 1/2 cycle
Leakage @ 175° C	$I_{RFM}$	500	1000	u/Amps
Operating Temp	$T_{op}$	-65 to 175		°C
Junction Temp	$T_{j,max}$	175	175	°C
Storage Temp	$T_{st}$	-65 to 190		°C
CASE	—	TO-220	TO-218	—

# Fast Recovery Series

## Electrical Characteristics ( $T_A = 25^\circ\text{C}$ )

PARAMETER	Symbol	STO-20	STO-18	UNITS
Leakage @ $25^\circ\text{C}$	$I_{RFM}$	15	30	$\mu\text{Amps}$
Peak Inverse Volts	$P_{IV}$	50	50	Volts/min.
Peak Inverse Volts	$P_{IV}$	600	600	Volts/max.
Forward Volts, typ.*	$V_F$	1@12	1@35	Volts @ $I_F$ , Amps
Forward Volts, max.*	$V_F$	1.2@12	1.3@35	Volts @ $I_F$ , Amps
Reverse Recovery	$t_{rr}$	35 thru 200		n/sec., 1-1-1/2

\*For 600 volt PIV device.

