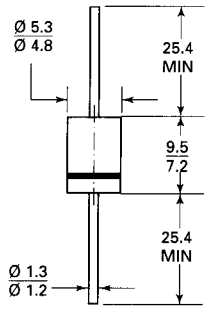
BY396...BY399
FAST SILICON RECTIFIERS

FEATURES

* Low forward voltage
* High current capability
* Low leakage current
* High surge capability
* Low cost



VOLTAGE RANCE
100 to 800 Volts
CURRENT
3.0 Amperes

Dimensions in mm

Absolute Maximum Ratings (T_a= 25 °C)

		Symbol	Value	Unit
Repetitive Peak Reverse Voltage	**BY396**	V_{RRM}	100	V
	BY397	V_{RRM}	200	V
	BY398	V_{RRM}	400	V
	BY399	V_{RRM}	800	V
Surge Forward Current, Half Cycle 50Hz, starting from T_j = 25 °C		I_{FSM}	100	A
Average Forward Current at T_{amb} = 50 °C		I_{FAV}	3[1)]	A
Junction Temperature		T_j	175	°C
Ambient Operating Temperature Range		T_{amb}	-40 to + 175	°C
Strage Temperature Range		T_S	-40 to + 175	°C

[1)] Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.

Characteristics at T_j = 25°C

	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at I_F = 3 A	V_F	-	-	1.3	V
Leakage Current at V_{RRM}	I_R	-	-	10	µA
Forward Recovery Time at I_F = 100 mA	t_{fr}	-	-	1.0	µs
Reverse Recovery Time from I_F = 10 mA through I_R = 10 mA to I_R = 1mA	t_{fr}	-	-	0.5	µs
Thermal Resistance Junction to Ambient Air	R_{thA}	-	-	30[1)]	K/W

[1)] Valid provided that leads are kept at ambient temperature at a distance of 8 mm from case.