

QUICK REFERENCE
DATA

- $V_R = 1500 - 3000V$
- $I_F = 0.35A$
- $t_{rr} = 250nS$
- $I_R = 0.25\mu A$

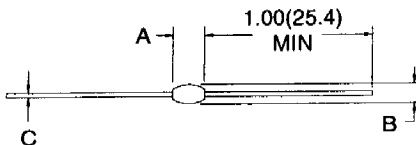
AXIAL LEADED HERMETICALLY SEALED HIGH
VOLTAGE FAST RECTIFIER DIODE

- Low reverse recovery time
- High thermal shock resistance
- Hermetically sealed with Metoxilite metal oxide
- Low switching losses
- Soft, non-snap off, recovery characteristics

ABSOLUTE MAXIMUM RATINGS (@ 25°C unless otherwise specified)

	Symbol	F15	F20	F25	F30	Unit
Working reverse voltage	V_{RWM}	1500	2000	2500	3000	V
Repetitive reverse voltage	V_{RRM}	1500	2000	2500	3000	V
Average forward current (@ 55°C in oil)	$I_{F(AV)}$	← 0.35 →				A
Repetitive surge current (@ 55°C)	I_{FRM}	← 1.25 →				A
Non-repetitive surge current ($t_p = 8.3mS$, @ V_R & T_{jmax})	I_{FSM}	← 5.0 →				A
Storage temperature range	T_{STG}	← -65 to +175 →				°C
Operating temperature range	T_{OP}	← -65 to +175 →				°C

MECHANICAL



A	B	C
0.350(8.89) MAX	0.215(5.5) MAX	0.040±0.003 (1.02±0.08)



CHARACTERISTICS (@ 25°C unless otherwise specified)

	Symbol	F15	F20	F25	F30	Unit
Average forward current max. (pcb mounted; $T_A = 55^\circ\text{C}$) for sine wave for square wave ($d = 0.5$)	$I_{F(AV)}$	← 0.16 →				A
	$I_{F(AV)}$	← 0.20 →				A
Average forward current max. (unstirred oil at 55°C) for sine wave for square wave	$I_{F(AV)}$	← 0.33 →				A
	$I_{F(AV)}$	← 0.35 →				A
I^2t for fusing ($t = 8.3\text{ms}$) max.	I^2t	← 0.10 →				A^2S
Forward voltage drop max. @ $I_F = 0.10\text{A}$, $T_j = 25^\circ\text{C}$	V_F	← 5.00 →				V
Reverse current max. @ V_{RWM} , $T_j = 25^\circ\text{C}$ @ V_{RWM} , $T_j = 100^\circ\text{C}$	I_R	← 0.25 →				μA
	I_R	← 10 →				μA
Reverse recovery time max. 50mA I_F to 100mA I_R . Recover to 25mA I_{RR} .	t_{rr}	← 250 →				nS
Junction capacitance typ. @ $V_R = 5\text{V}$, $f = 1\text{MHz}$	C_j	← 2.5 →				pF
Thermal resistance - junction to oil Stirred oil Unstirred oil	$R_{\theta JO}$	← 30 →				$^\circ\text{C/W}$
	$R_{\theta JO}$	← 48 →				$^\circ\text{C/W}$
Thermal resistance - junction to amb. on 0.06" thick pcb. 1oz copper.	$R_{\theta JA}$	← 120 →				$^\circ\text{C/W}$

