

Fast Recovery High Voltage Rectifier

Reverse Voltage - 3500V to 6000V

Forward Current – 0.2A

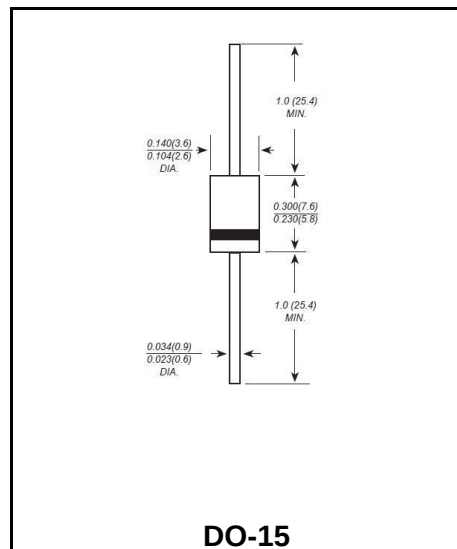
FEATURES

- AVALANCHE OPERATION
- UL 94V0 FLAME RETARDANT EPOXY MOLDING COMPOND
- BEVELED ROUND CHIP
- LOW COST

Maximum ratings

Ratings at $T_A=25^{\circ}\text{C}$ (unless otherwise specified)

Parameter		Symbols	R3500F	R4000F	R5000F	R6000F	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	3500	4000	5000	6000	V
Maximum RMS voltage		V_{RMS}	2450	2800	3500	4200	V
Maximum DC Blocking Voltage		V_{DC}	3500	4000	5000	6000	V
Average Forward Current $T_A = 55^{\circ}\text{C}$		$I_{F(AV)}$	0.2				A
Peak Forward Surge Current 8.3ms, half sine	R3500F-4000F	I_{FSM}	25				A
	R5000F-6000F		20				A
Maximum Instantaneous Forward Voltage at 0.2 A; $T_A = 25^{\circ}\text{C}$	R3500F-4000F	V_F	8.0				V
	R5000F-6000F		12.0				V
Maximum DC Reverse Current $T_a = 25^{\circ}\text{C}$ at Rated DC Blocking Voltage		I_R	5.0				μA
Typical Junction Capacitance Measured at 1.0MHz, $V_R=4.0\text{V}$	R3500F-4000F	C_j	6				pF
	R5000F-6000F		4				pF
Maximum Reverse Recovery Time $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{RR}=0.25\text{A}$		T_{rr}	500				nS
Operating and Storage Temperature Range		T_j, T_{stg}	-55 ~ +125 -55 ~ +150				$^{\circ}\text{C}$



RATINGS AND CHARACTERISTICS CURVES

FIG. 1-MAXIMUM CURRENT RATING
EFFECT OF COPPER AREA.
RESISTIVE/INDUCTIVE LOAD

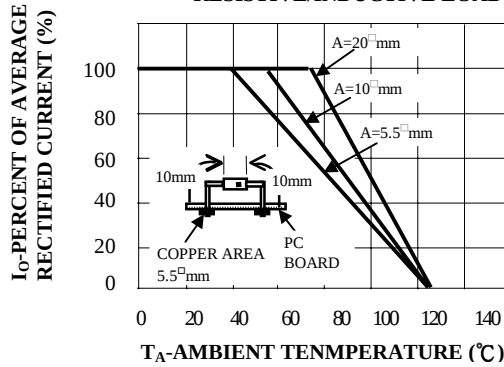


FIG. 2-MAXIMUM CURRENT RATING
CAPACITIVE LOAD,
10mm LEAD LENGTHS

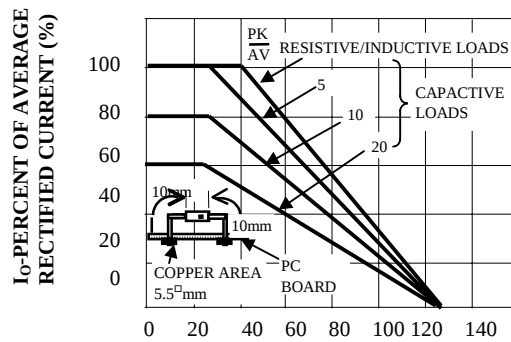


FIG. 3-MAXIMUM CURRENT RATING
EFFECT OF COPPER AREA.
RESISTIVE/INDUCTIVE LOAD

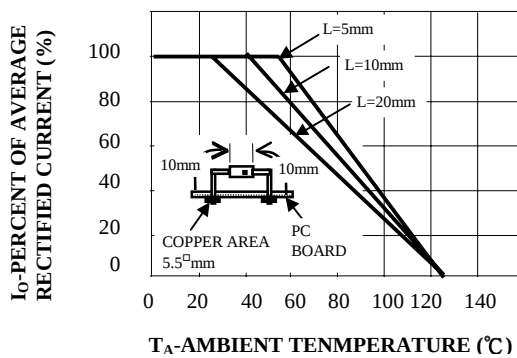
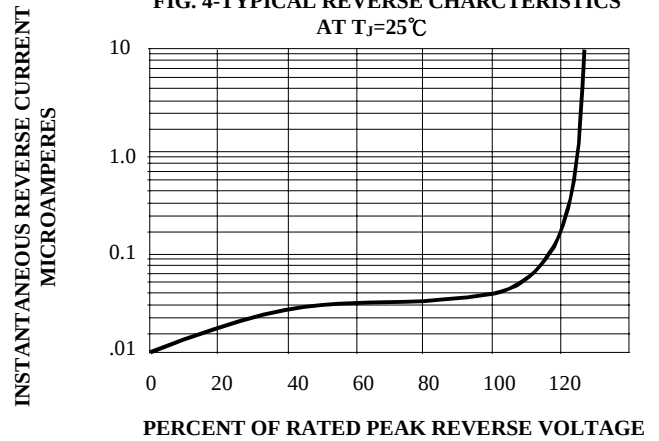
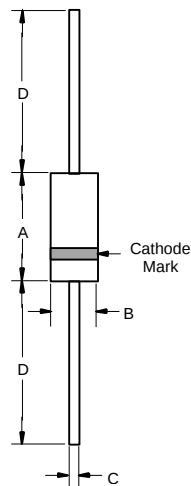


FIG. 4-TYPICAL REVERSE CHARACTERISTICS
AT T_J=25°C



Package Outline DO-15



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.230	.300	5.80	7.60	
B	.104	.140	2.60	3.60	
C	.026	.034	.68	0.70	
D	1.000	---	25.40	---	

Package	Packing Description	Packing Quantity	Industry Standard
DO-15	BOX	500/3000	EIA-481-1