



R3500F THRU R6000F

Features

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

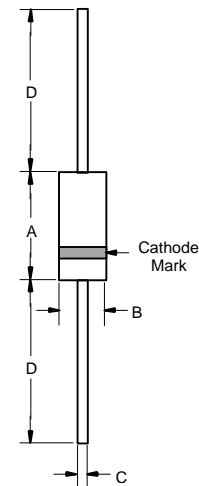
**0.2mA Fast Recovery
High Voltage Rectifier
3500 - 6000 Volts**

Maximum Ratings

- Operating Temperature -55 °C to +125 °C
- Storage Temperature: - 55°C to +150°C

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
R3500F	R3500F	3500V	2450V	3500V
R4000F	R4000F	4000V	2800V	4000V
R5000F	R5000F	5000V	3500V	5000V
R6000F	R6000F	6000V	4200V	6000V

DO-15

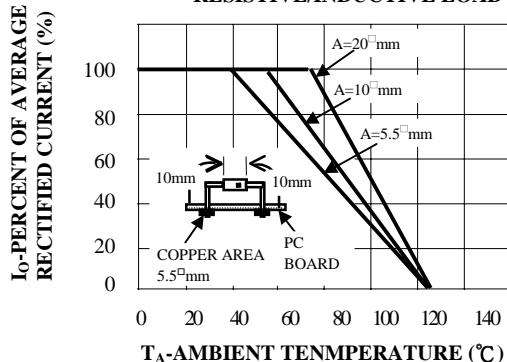


Electrical Characteristics @ 25°C Unless Otherwise Specified

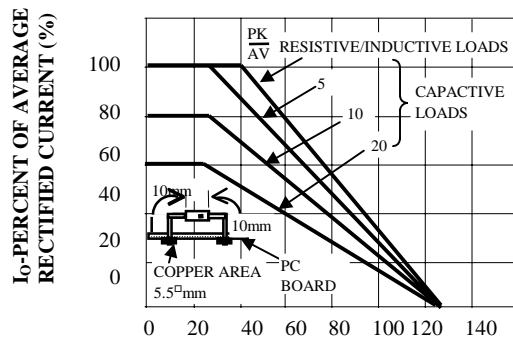
Average Forward Current	$I_{F(AV)}$	0.2A	$T_A = 55^\circ\text{C}$
Peak Forward Surge Current R3500F~4000F R5000F~6000F	I_{FSM}	25 A 20 A	8.3ms, half sine
Maximum Instantaneous Forward Voltage R3500F~4000F R5000F~6000F	V_F	8.0 V 12.0 V	$I_{FM} = 0.2\text{A};$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5.0 μA	$T_A = 25^\circ\text{C}$
Typical Junction Capacitance R3500F~4000F R5000F~6000F	C_J	6 pF 4 pF	Measured at 1.0MHz, $V_R=4.0\text{V}$
Maximum Reverse Recovery Time	T_{rr}	500nS	$I_F=0.5\text{A}, I_R=1.0\text{A},$ $I_{rr}=0.25\text{A}$

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	.70	.90	
D	1.000	---	25.40	---	

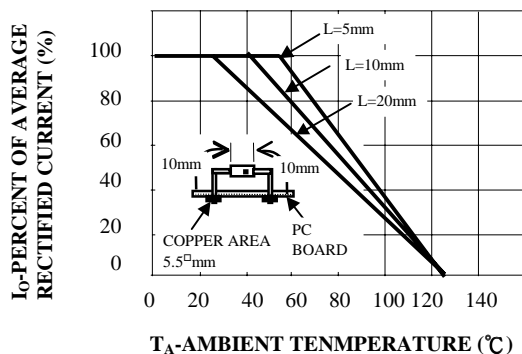
**FIG. 1-MAXIMUM CURRENT RATING
 EFFECT OF COPPER AREA.
 RESISTIVE/INDUCTIVE LOAD**



**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 $T_J=25^\circ\text{C}$**

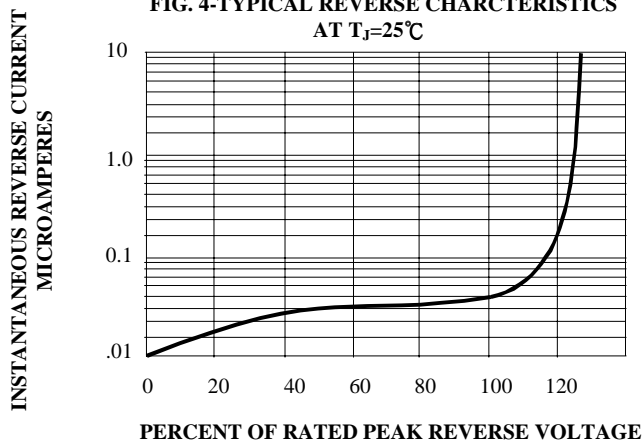


FIG. 5-MAXIMUM FORWARD SURGE VS NUMBER OF CYCLES

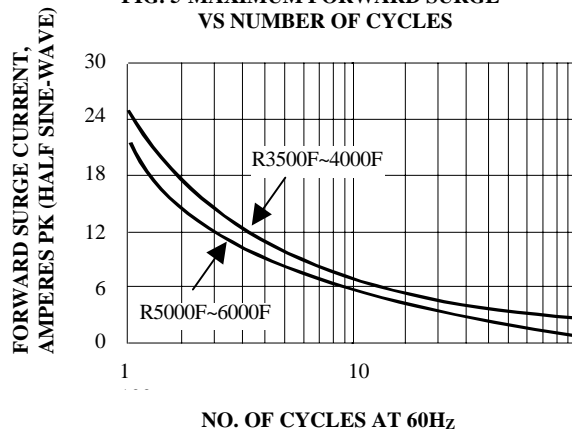


FIG. 6-TYPICAL JUNCTION CAPACITANCE

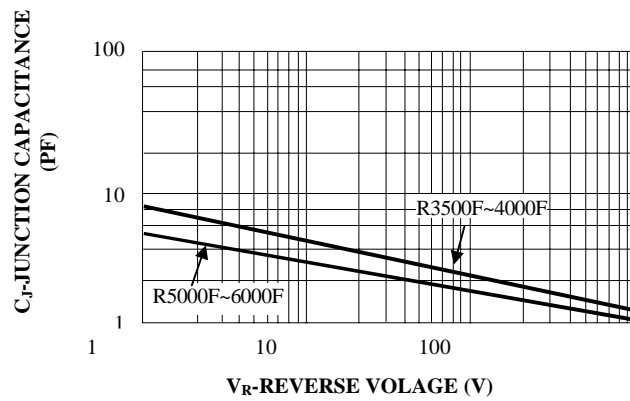


FIG. 7-TYPICAL FORWARD CHARACTERISTICS

