



R3500F THRU R6000F

Features

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

Maximum Ratings

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

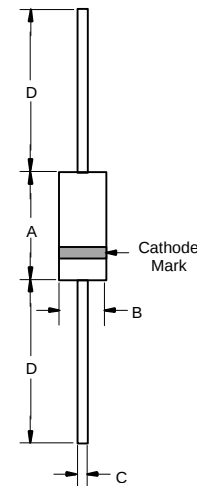
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
R3500F	R3500F	3500V	2450V	3500V
R4000F	R4000F	4000V	2800V	4000V
R5000F	R5000F	5000V	3500V	5000V
R6000F	R6000F	6000V	4200V	6000V

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	$I_F=0.5\text{A}, I_R=1.0\text{A},$ $I_{rr}=0.25\text{A}$

0.2mA Fast Recovery High Voltage Rectifier 3500 - 6000 Volts

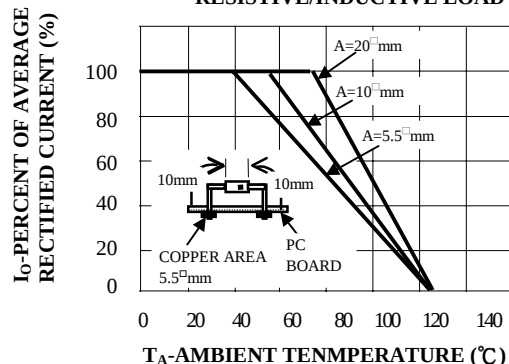
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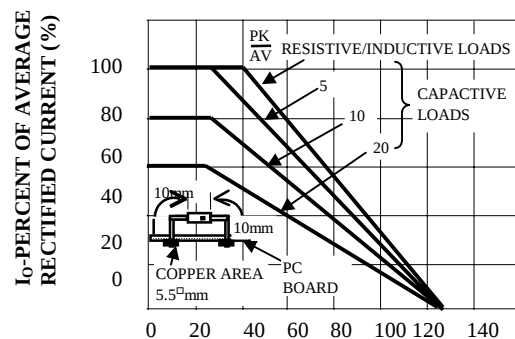
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.230	.300	5.80	7.60	
B	.104	.140	2.60	3.60	
C	.026	.034	.70	.90	
D	1.000	---	25.40	---	

RATINGS AND CHARACTERISTICS CURVES

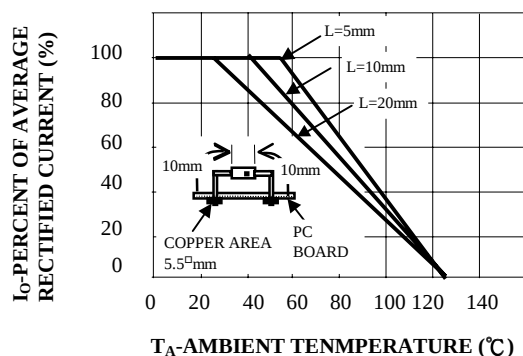
**FIG. 1-MAXIMUM CURRENT RATING
EFFECT OF COPPER AREA.
RESISTIVE/INDUCTIVE LOAD**



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

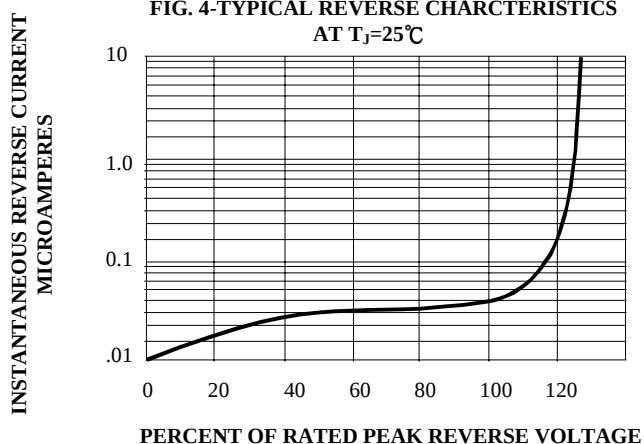


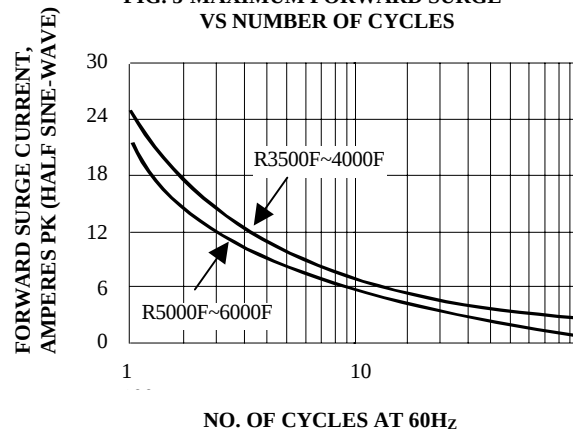
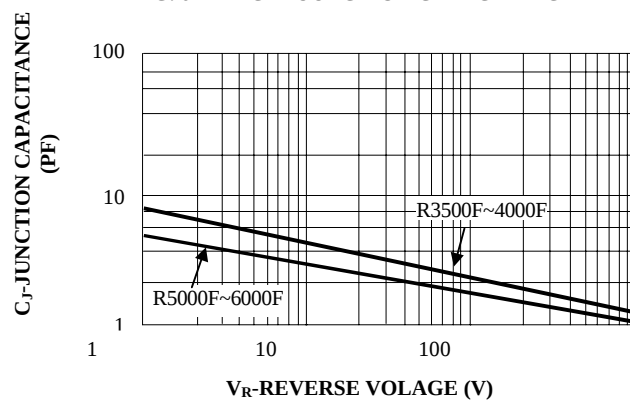
FIG. 5-MAXIMUM FORWARD SURGE
VS NUMBER OF CYCLES

FIG. 6-TYPICAL JUNCTION CAPACITANCE

FIG. 7-TYPICAL FORWARD
CHARACTERISTICS