



# 1.5A Fast Recovery Rectifier

## Features

1. High current capability
2. Low reverse leakage current
3. Low forward voltage drop
4. Fast switching speed for high efficiency



## Absolute Maximum Ratings

 $T_j=25^{\circ}\text{C}$ 

Parameter	Test Conditions	Type	Symbol	Value	Unit
Repetitive peak reverse voltage = Working peak reverse voltage = DC blocking voltage		FR151	$V_{RRM}$	50	V
		FR152	$=V_{RWM}$	100	V
		FR153	$=V_R$	200	V
		FR154		400	V
		FR155		600	V
		FR156		800	V
		FR157		1000	V
Peak forward surge current			$I_{FSM}$	50	A
Average forward current	$T_A=55^{\circ}\text{C}$		$I_{FAV}$	1.5	A
Storage temperature range			$T_{stg}$	-65~+175	$^{\circ}\text{C}$

## Electrical Characteristics

 $T_j=25^{\circ}\text{C}$ 

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=1.5\text{A}$		$V_F$			1.3	V
Reverse current	$T_A=25^{\circ}\text{C}$		$I_R$			5	$\mu\text{A}$
	$T_A=100^{\circ}\text{C}$		$I_R$			100	$\mu\text{A}$
Maximum reverse recovery time	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$	FR151~FR154	$T_{rr}$			150	ns
		FR155	$T_{rr}$			250	ns
		FR156~FR157	$T_{rr}$			500	ns
Diode capacitance	$V_R=4\text{V}, f=1\text{MHz}$		$C_D$		20	pF	

**Excel Semiconductor**



Characteristics ( $T_j=25^{\circ}\text{C}$  unless otherwise specified)

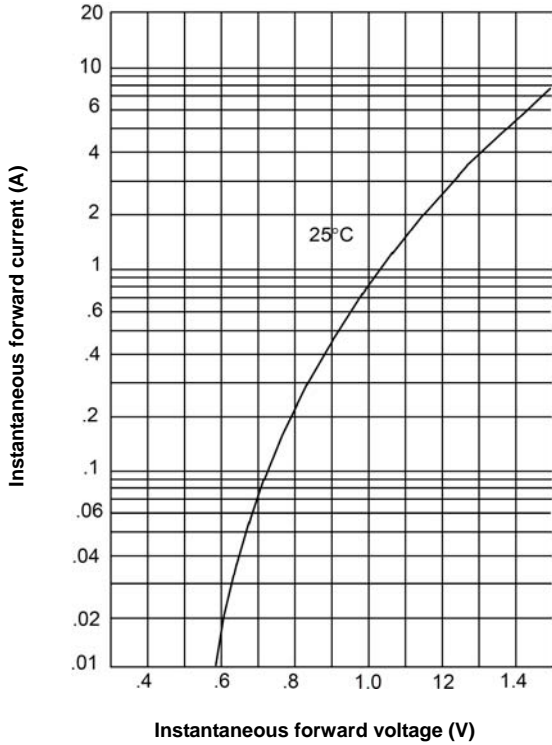


Figure 1. Typical forward characteristics

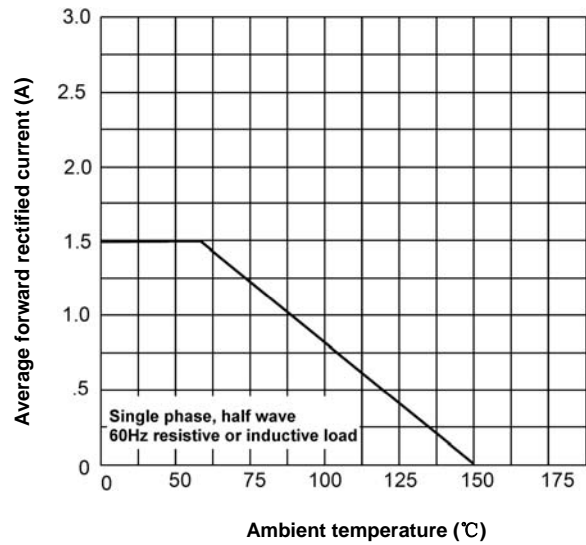


Figure 2. Forward derating curve

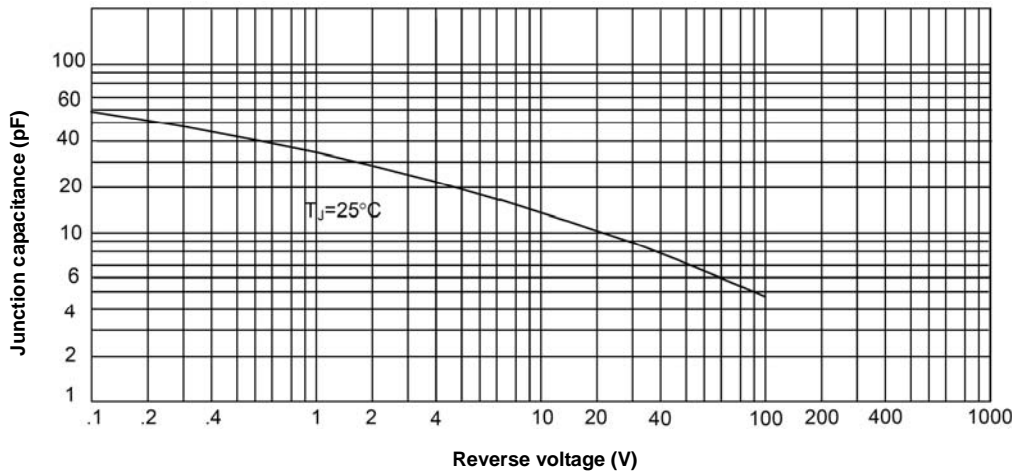
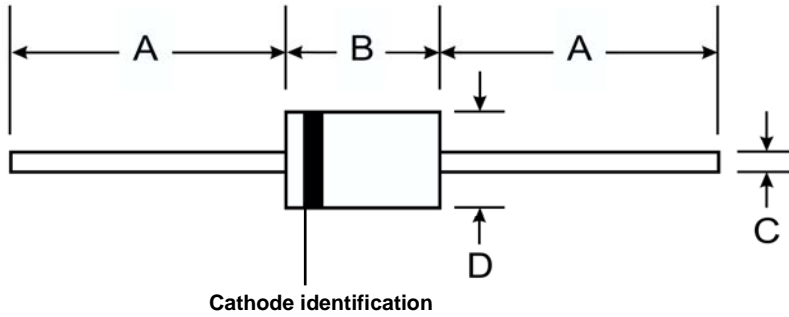


Figure 3. Junction capacitance



Dimensions in mm



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	1.000	---	25.40	---
B	0.230	0.300	5.80	7.60
C	0.026	0.034	0.70	0.90
D	0.104	0.140	2.60	3.60

Case: molded plastic DO-15

Polarity: cathode band

Marking: type number

Marking

