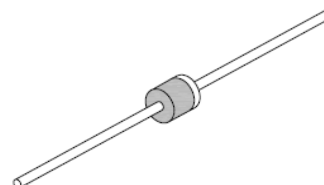


2.5A Fast Recovery Rectifier

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds
.0375" (9.5mm) lead length, 5lbs (2.3kg) tension
- RoHS Compliance



R-3



Mechanical Data

Case:	R-3, molded plastic
Epoxy:	UL 94V-0 rate flame retardant
Terminals:	Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
Polarity:	Color band denotes cathode end
Weight:	0.40 gram

Maximum Ratings and Electrical Characteristics ($T_A=25^\circ\text{C}$ unless noted otherwise)

Symbol	Description	TF 251	TF 252	TF 253	TF 254	TF 255	TF 256	TF 257	Unit	Conditions
		FR 251	FR 252	FR 253	FR 254	FR 255	FR 256	FR 257		
V_{RRM}	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
V_{RMS}	Maximum RMS Voltage	35	70	140	280	420	560	700	V	
V_{DC}	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
I_{AV}	Maximum Average Forward Rectified Current	2.5							A	Ta=55 °C
I_{FSM}	Peak Forward Surge Current	150							A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)

2.5A Fast Recovery Rectifier

TF251 - TF257/FR251 - FR257

Symbol	Description	TF 251	TF 252	TF 253	TF 254	TF 255	TF 256	TF 257	Unit	Conditions
		FR 251	FR 252	FR 253	FR 254	FR 255	FR 256	FR 257		
V _F	Maximum Instantaneous Forward Voltage	1.3							V	I _F =2.5 A
I _R	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0							μA	T _A =25° C
		100								T _A =100° C
T _{rr}	Typical Reverse Recovery Time	150				250	500		nS	I _F =0.5A, I _R =1A, I _{rr} =0.25A
C _J	Typical Junction Capacitance	60							pF	V _R =4V, f=1MHz
T _J	Operating Temperature range	-55 to +125							° C	
T _{STG}	Storage Temperature Range	-55 to +150								

Typical Characteristics Curves

Fig.1-Max. Forward Current Derating Curve

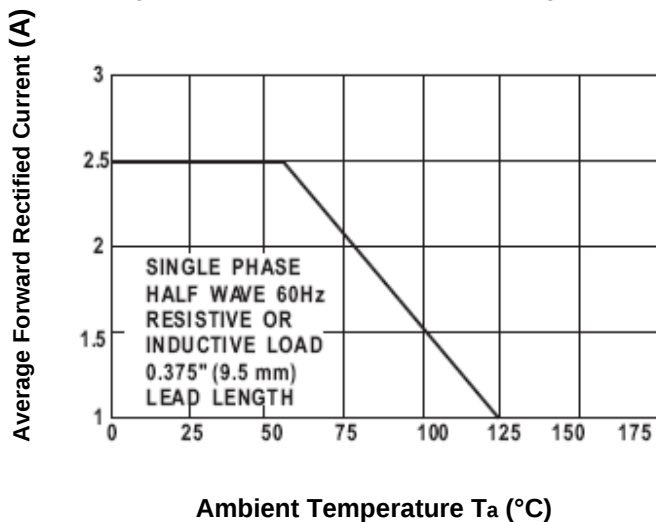
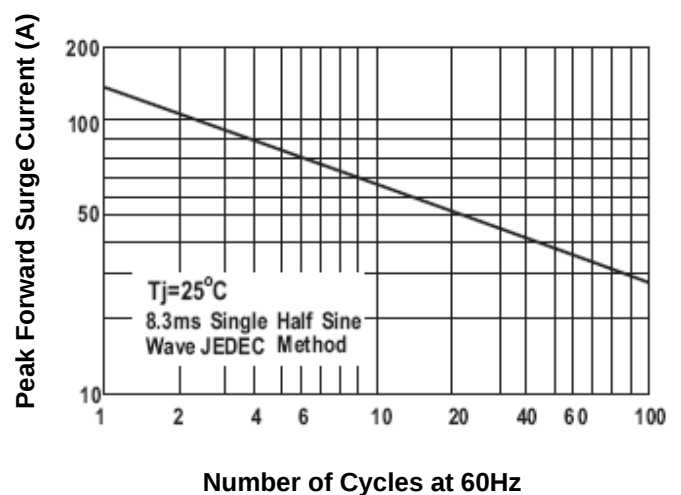


Fig.2-Max. Non-Repetitive Forward Surge Current



2.5A Fast Recovery Rectifier

TF251 - TF257/FR251 - FR257

Fig.3- Typical Forward Characteristics

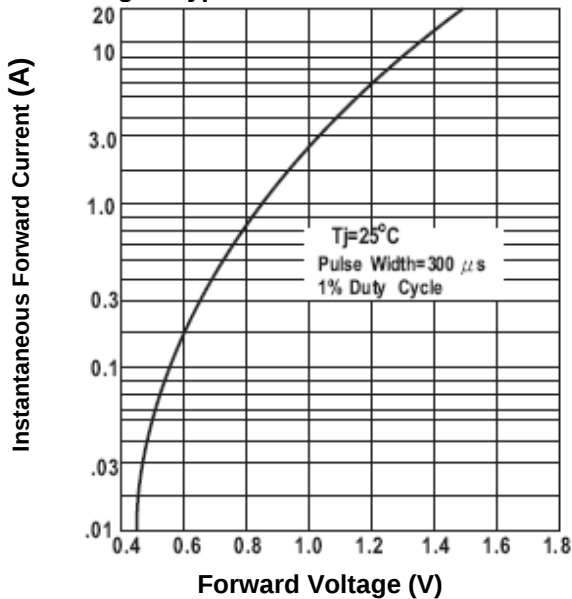
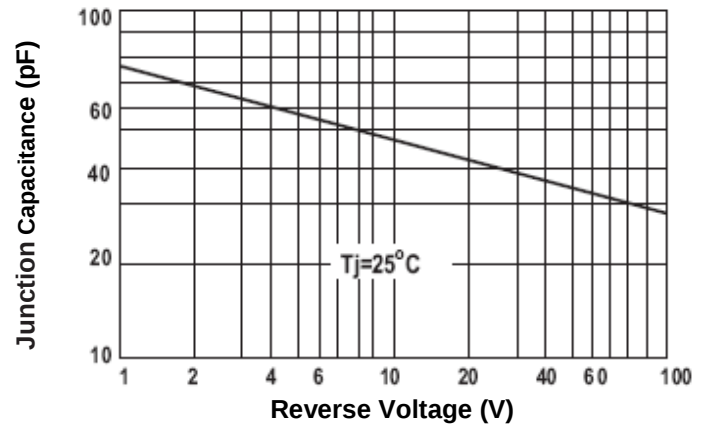
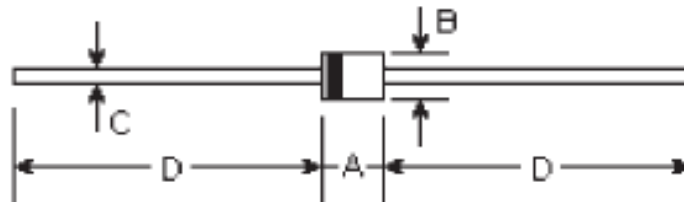


Fig.4- Typical Junction Capacitance



Dimensions in inches & mm



R-3

DIMENSIONS					
DIM	inches		mm		Note
	Min.	Max.	Min.	Max.	
A	0.138	0.161	3.50	4.10	
B	0.138	0.161	3.50	4.10	⌀
C	0.040	0.043	1.00	1.10	⌀
D	1.000	-	25.40	-	

TAITRON
components incorporated

Rev. B/AH 2008-04-29

2.5A Fast Recovery Rectifier

TF251 - TF257/FR251 - FR257

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