

ULTRA LOW VF SCHOTTKY RECTIFIER

Reverse Voltage - 100 V

Forward Current - 60 A

Features

FEATURES

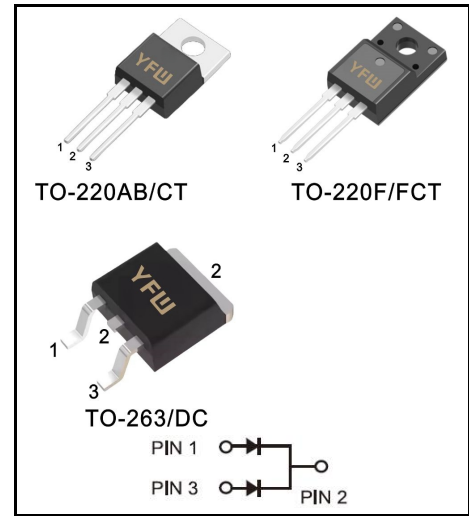
- ◆ Ultra low forward voltage
- ◆ High current capability
- ◆ High forward surge capability
- ◆ Low power losses, High efficiency
- ◆ Guarding for over voltage protection

Mechanical Data

- ◆ Case: TO-220AB/CT, TO-220F/FCT, TO-263/DC
- ◆ Solder bath temperature 275°C maximum, 10s per JESD22-106

Primary Characteristic

I_o	2*30A
V_{RRM}	100V
I_{FSM}	360A
V_F	0.75V
T_JMax	150°C



Maximum Ratings (Per Leg) At Ta=25°C Unless Otherwise Specified

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Volta	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	Per Leg	30	A
	Total	60	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	360	A
Operating Temperature Range	T_J	-40 ~ +150	°C
Storage Temperature Range	T_{STG}	-40 ~ +150	°C
Typical Thermal Resistance (Note1) TO-220AB, TO-263/TO-220F	R_{θJC}	2/4	°C/W

Note1: Thermal resistance from Junction to case per leg mounted on heatsink

Electrical Characteristics (Per Leg) Unless Otherwise Specified

Characteristics	Symbols	Value		Units
		Typ	Max	
Forward Voltage Drop(Note2)	V_F	0.54	-	V
at I _F =10A				
		TA=125°C		
at I _F =20A		TA=25°C	0.75	
		TA=125°C	-	
at I _F =30A		TA=25°C	0.79	
	TA=125°C	0.75	-	
Maximum Reverse Current at V _R =100V	I_R	11	50	μA
		2	-	mA

Note2: Pulse test: 300 μs pulse width, 1 % duty cycle

Ratings And Characteristic Curves

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

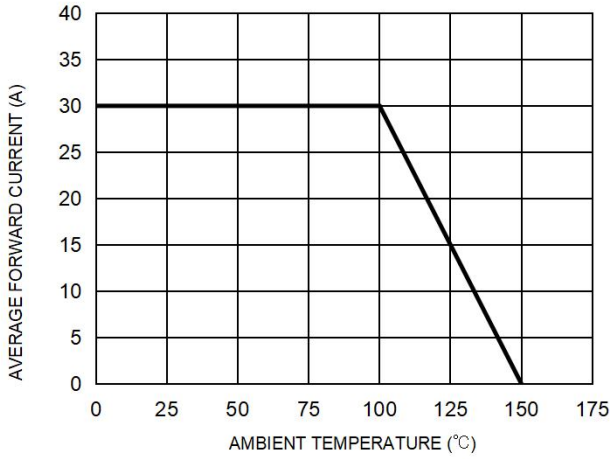


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

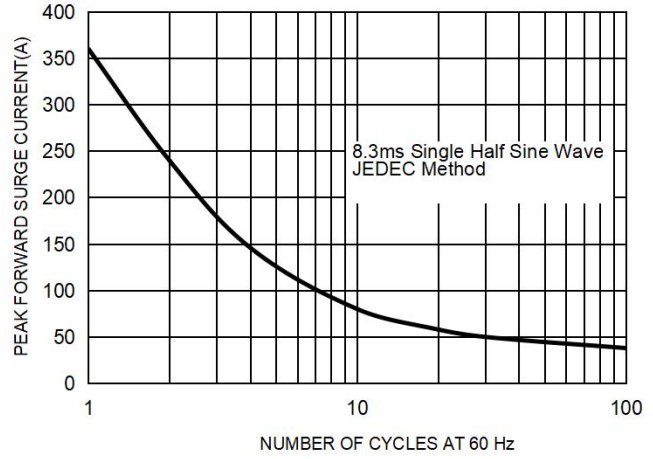


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

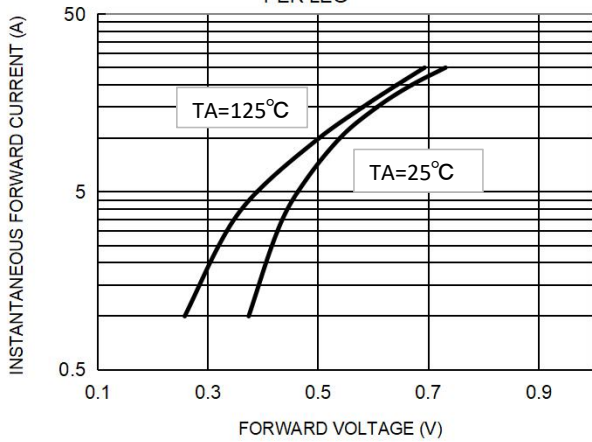
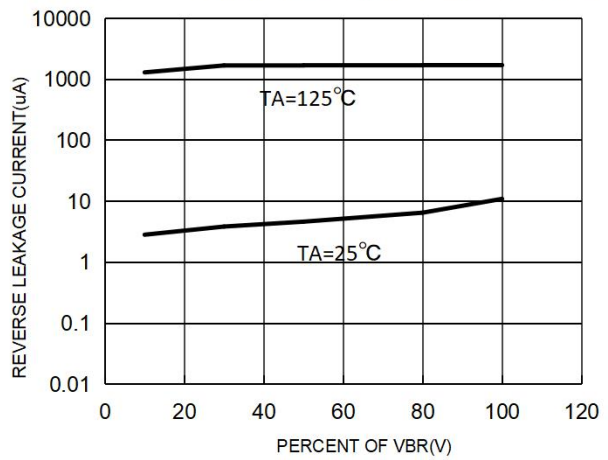
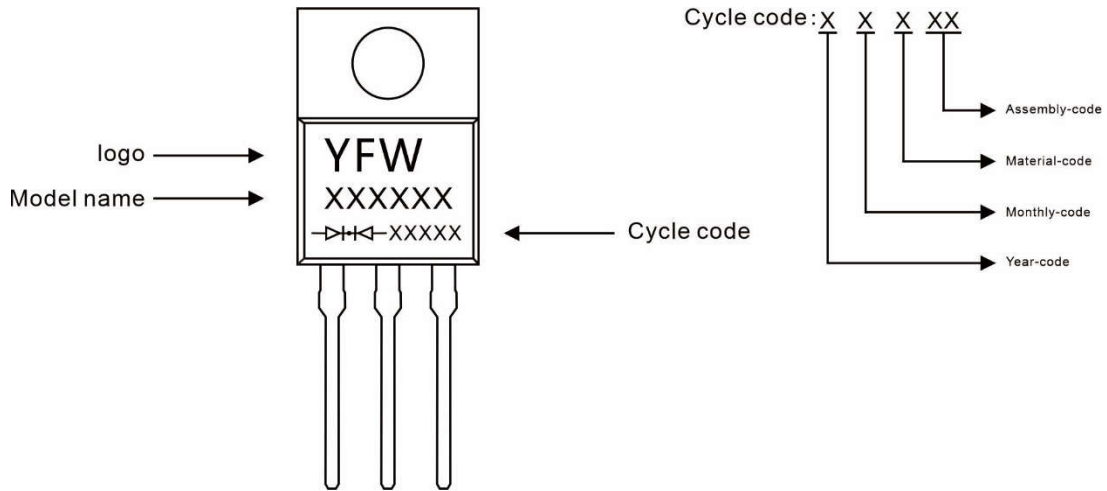


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



Marking Diagram



Ordering information

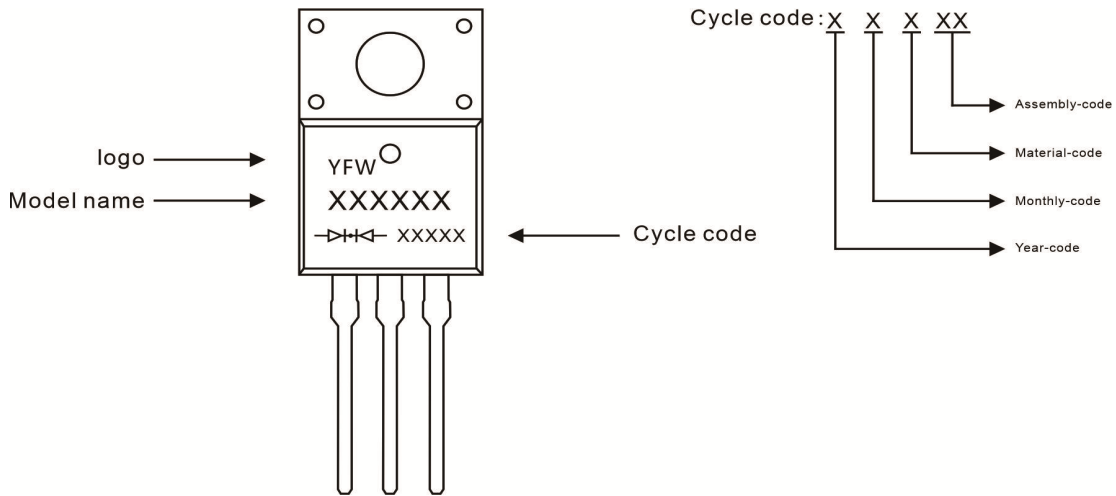
Model name	Package	Unit Weight	Base Quantity	Packing Quantity
SRT60L100CT	TO-220AB	0.07oz(1.96g)	50pcs/tube	1000PCS/Box 5000PCS/Carton

Package Dimensions

TO-220AB

Symbol	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.30	4.70	0.169	0.185
A1	2.52	2.82	0.099	0.111
b	0.71	0.91	0.028	0.036
b1	1.17	1.37	0.046	0.054
c	0.30	0.50	0.012	0.020
c1	1.17	1.37	0.046	0.054
D	9.90	10.20	0.390	0.402
E	8.50	8.90	0.335	0.350
E1	12.00	12.50	0.472	0.492
e	2.44	2.64	0.096	0.104
e1	4.88	5.28	0.192	0.208
F	2.60	2.80	0.102	0.110
L	13.20	13.80	0.520	0.543
L1	3.80	4.20	0.150	0.165
Φ	3.60	3.96	0.142	0.156

Marking Diagram



Ordering information

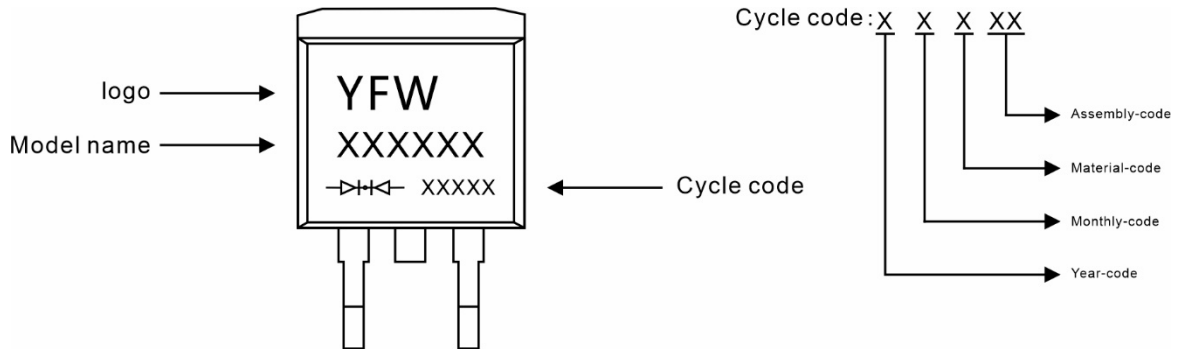
Model name	Package	Unit Weight	Base Quantity	Packing Quantity
SRT60L100FCT	TO-220F	0.06oz(1.74g)	50pcs/tube	1000PCS/Box 5000PCS/Carton

Package Dimensions

TO-220F

Symbol	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.50	4.90	0.177	0.193
A1	2.34	2.74	0.092	0.108
A2	2.66	2.86	0.105	0.113
b	0.75	0.85	0.030	0.033
b1	1.24	1.44	0.049	0.057
c	0.40	0.60	0.016	0.024
D	10.00	10.32	0.394	0.406
E	15.75	16.05	0.620	0.632
e	2.44	2.64	0.096	0.104
e1	4.88	5.28	0.192	0.208
F	3.10	3.5	0.122	0.138
L	13.50	13.90	0.531	0.547
L1	2.90	3.30	0.114	0.130
Φ	3.10	3.30	0.122	0.130

Marking Diagram



Ordering information

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
SRT60L100DC	TO-263	0.04oz(1.16g)	800pcs/reel	1600pcs/box 8000pcs/Carton

Package Dimensions

TO-263

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	4.30	4.70	0.169	0.185
A1	0.00	0.15	0.000	0.006
A2	4.30	4.55	0.169	0.179
B	1.10	1.50	0.043	0.059
b	0.70	0.90	0.028	0.035
b1	1.20	1.50	0.047	0.059
c	0.30	0.60	0.012	0.024
c1	1.17	1.37	0.046	0.054
D	9.90	10.20	0.390	0.402
E	8.50	9.50	0.335	0.374
e	2.44	2.64	0.096	0.104
e1	4.88	5.28	0.192	0.208
L	15.20	15.80	0.598	0.622
L1	5.20	5.40	0.205	0.213
L2	2.40	2.60	0.094	0.102
L3	1.60	1.80	0.063	0.071

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