

Schottky Barrier Rectifiers

Reverse Voltage - 300 V

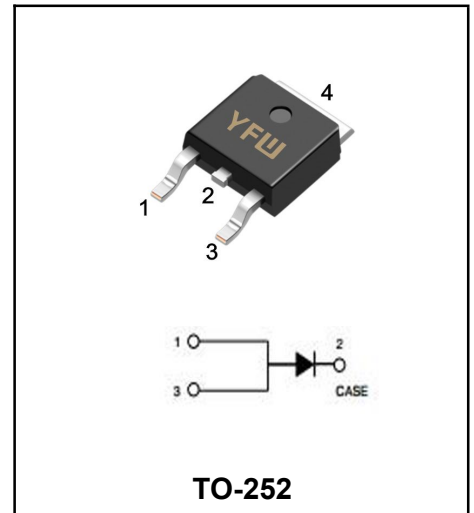
Forward Current - 10 A

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low forward voltage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed
260°C/10 seconds at terminals

Mechanical Data

- ◆ Case : Molded plastic body
- ◆ Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- ◆ Polarity : Polarity symbol marking on body
- ◆ Mounting Position : Any



Primary Characteristic

I_(AV)	10A
V_{RRM}	300V
I_{FSM}	150A
V_F	0.93V
T_J Max	150°C

Maximum Ratings (Ta=25°C unless otherwise specified)

Parameter	Symbols	Value	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	300	V
Working Peak Reverse Voltage	V_{RWM}	210	V
Maximum DC Blocking Voltage	V_{DC}	300	V
Maximum average forward rectified current at T _C =110 °C	I_(AV)	10	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150	A
Operating Temperature Range	T_J	-55 ~ +150	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C
Typical Thermal Resistance	R_{θJC}	4.5	°C/W

Electrical Characteristics (Ta=25°C unless otherwise specified)

Characteristics	Symbols	Value		Units
Forward Voltage Drop		Typ	Max	V
Maximum instantaneous forward voltage at 5.0A at 10.0A	V_F	0.83 0.93	0.88 0.98	
Maximum DC reverse current at rated DC blocking voltage	I_R	T _A =25 °C T _A =100 °C	0.5 1	u A mA

Ratings and Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

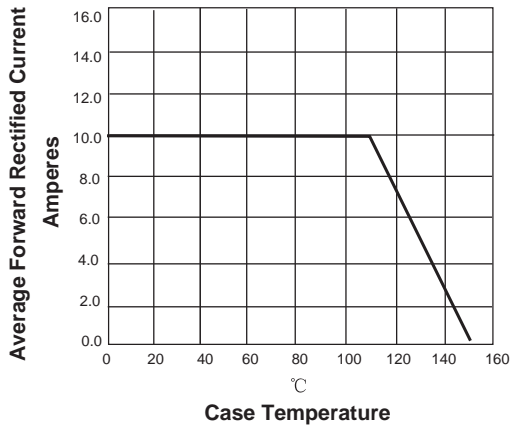


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

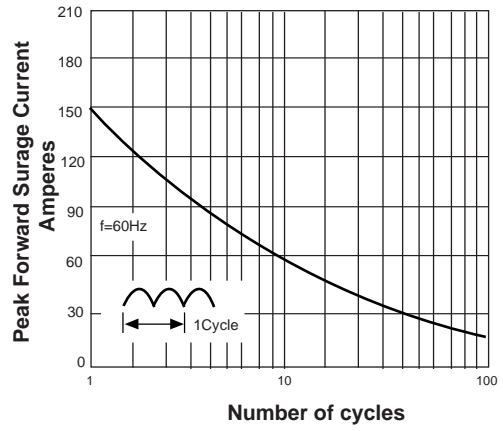


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

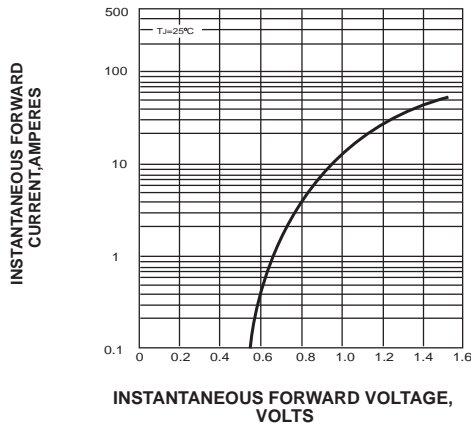
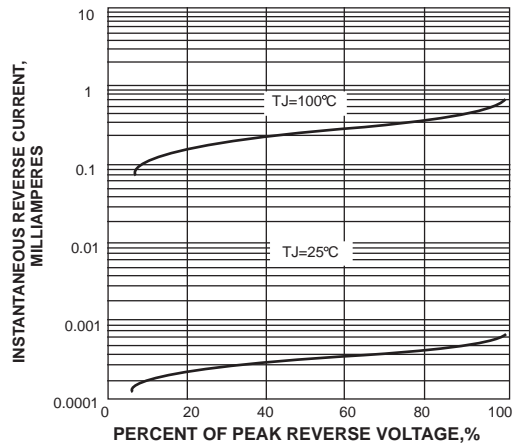
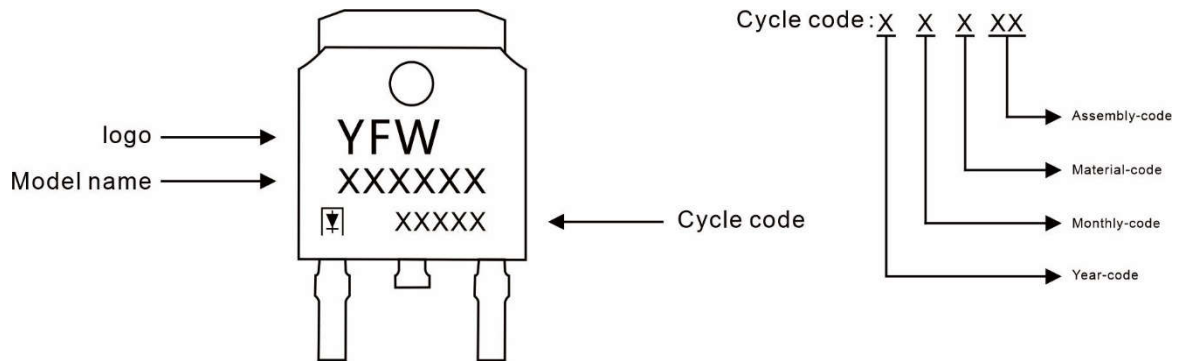


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram



Ordering information

Model name	Package	Unit Weight	Base Quantity	Packing Quantity
SRT10L300SCS	TO-252	0.011oz(0.32g)	2500pcs/reel	5000pcs/box 25000pcs/Cartron

Package Dimensions

TO-252

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	2.20	2.50	0.087	0.098
A1	0.00	0.12	0.000	0.005
A2	2.20	2.40	0.087	0.094
B	1.20	1.60	0.047	0.063
b	0.50	0.70	0.020	0.028
b1	0.70	0.90	0.028	0.035
c	0.40	0.60	0.016	0.024
c1	0.40	0.60	0.016	0.024
D	6.35	6.65	0.250	0.262
D1	5.20	5.40	0.205	0.213
E	5.40	5.70	0.213	0.224
e	2.20	2.40	0.087	0.094
e1	4.40	4.80	0.173	0.189
L	10.00	11.00	0.393	0.433
L1	2.70	3.10	0.106	0.122
L2	1.40	1.80	0.055	0.071
L3	0.90	1.50	0.035	0.059

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