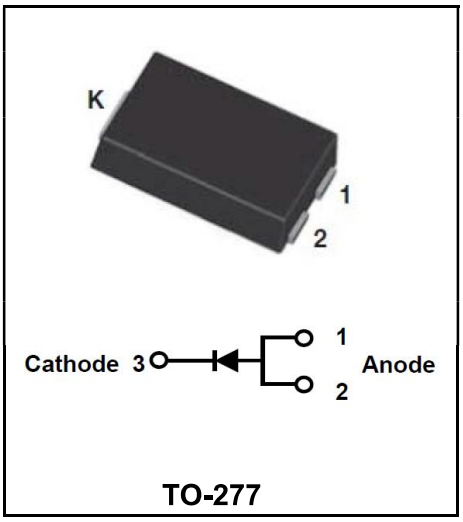
Fast Recovery Surface Mounted Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 5.0 A



FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Glass passivated Junction chip
- Low reverse leakage
- 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
- Weight : 0.003 ounce, 0.092 grams

Absolute Maximum Ratings and Electrical characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter	Symbols	RS5ASP	RS5BSP	RS5DSP	RS5GSP	RS5JSP	RS5KSP	RS5MSP	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_L=100°C	$I_{(AV)}$	5.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load	I_{FSM}	150							A
Maximum Instantaneous Forward Voltage at 5.0A	V_F	1.3							V
Maximum Instantaneous Reverse Current T_A = 25°C at Rated DC Reverse Voltage T_A = 125°C	I_R	5.0 500							uA
Maxinum reverse recovery time(Note 1)	Trr	150				250	500		ns
Typical junction capacitance (Note2)	C_J	50.0							pF
Typical Thermal Resistance	R_{qJA}	60.0							°C/W
Operating junction and storage temperature range	T_j,T_{stg}	-55 ~ +150							°C

Note:

1.Reverse recovery time test condition: IF=0.5A IR=1.0A Irr=0.25A

2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

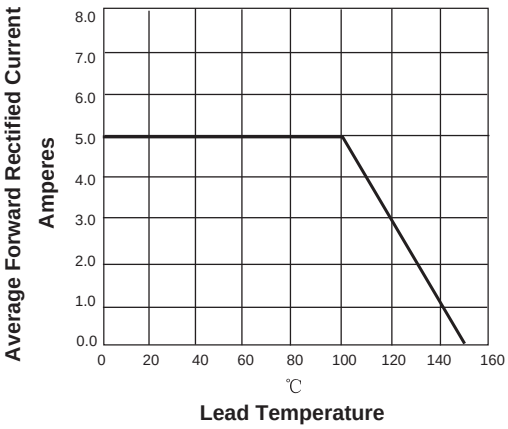


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

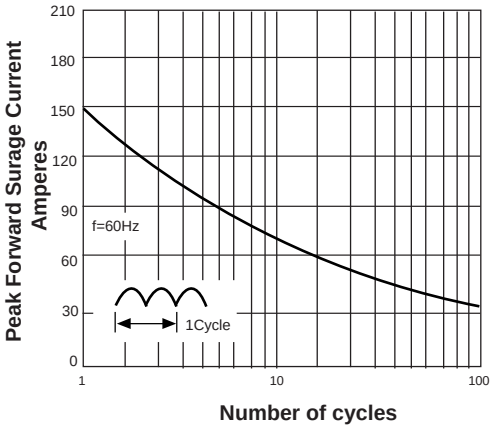


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

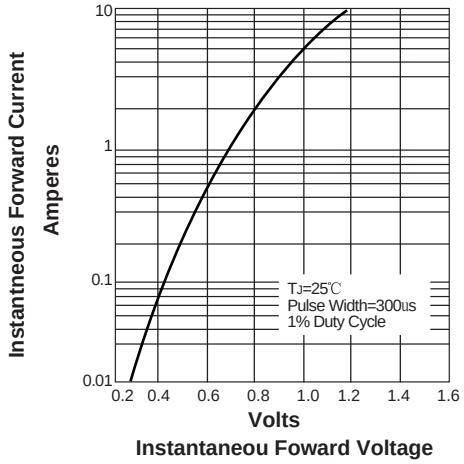
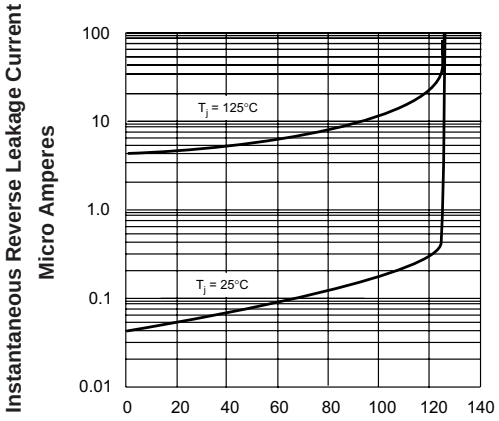
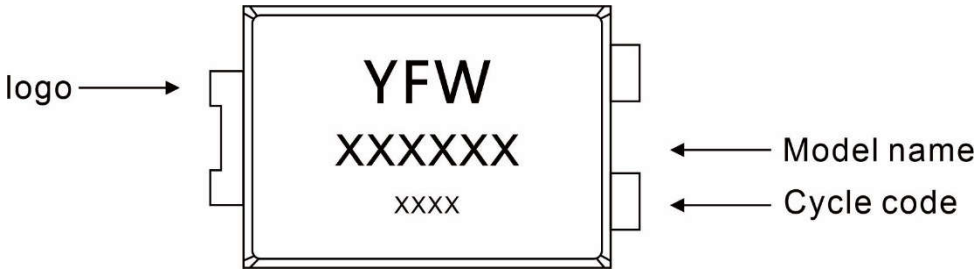


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram

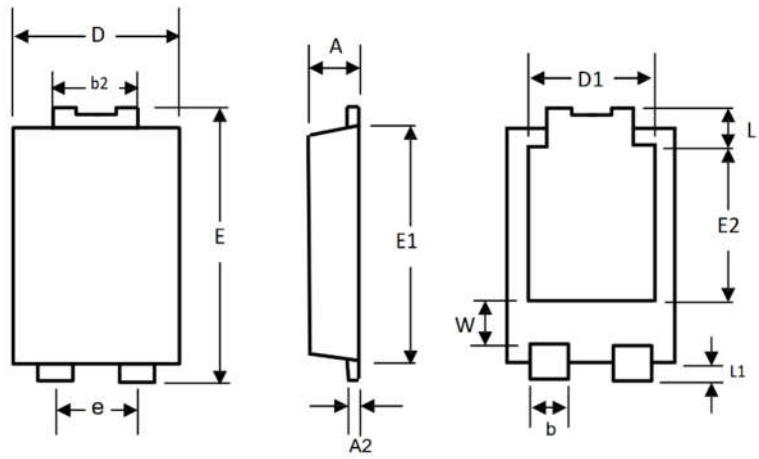


Ordering information

Package	Packing Description	Packing Quantity
TO-277	Tape/Reel,13"reel	5000PCS/Reel 50000PCS/Carton

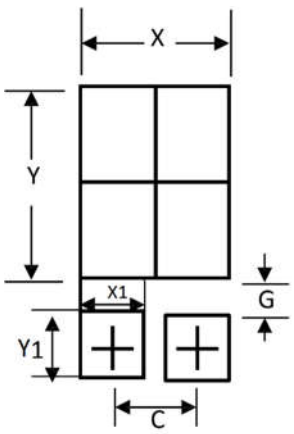
Package Dimensions

TO-277



Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	1.1	1.2	43	47
A2	0.3	0.4	12	16
b1	0.8	1	32	39
b2	1.7	1.9	67	75
D	3.9	4.1	154	162
D1	3.054		120	
E	6.4	6.6	252	260
e	1.84		73	
E1	5.3	5.5	209	217
E2	3.549		140	
L	0.8	1	32	39
L1	0.5	0.7	20	28
W	1.1	1.4	43	55

The recommended mounting pad size



Dim	Min
C	1.8
G	0.9
X	3.4
X1	1.4
Y	4.9
Y1	1.4

unit:mm

Disclaimer

The information presented in this document is for reference only. GuangDong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices),YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website https://www.yfwdiode.com, or consult YFW sales office for further assistance.