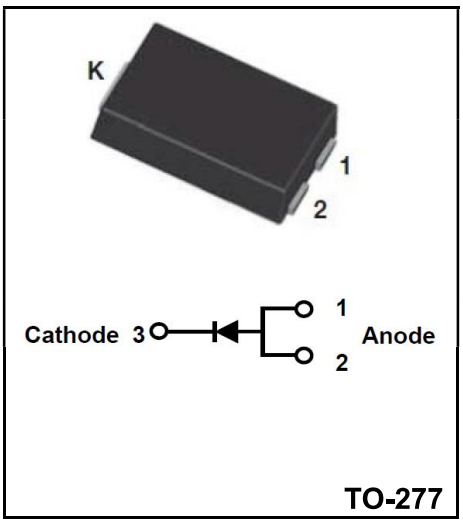
Standard Surface Mounted Rectifiers

Reverse Voltage - 50 to 1000V

Forward Current - 10 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 250℃/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 : 0.008 ounce, 0.225 grams

Maximum Ratings And Electrical Characteristics

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

Parameter	Symbols	S10ASP	S10BSP	S10DSP	S10GSP	S10JSP	S10KSP	S10MSP	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 ℃	$I_{(AV)}$	10							A
Peak forward surge current,8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200							A
Maximum instantaneous forward voltage at 10A	V_F	1.1							V
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=125 ℃	I_R	5.0 500							u A
Typical junction capacitance (Note1)	C_J	80.0							pF
Operating Temperature Range	T_J	-55 to +150							°C
Typical thermal resistance	T_{STG}	-55 to +150							°C
Typical thermal resistance	$R_{\theta JA}$	60.0							°C/W

Note:1.Measured at1MHz and applied reverse voltage of 4.0V D.C.

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

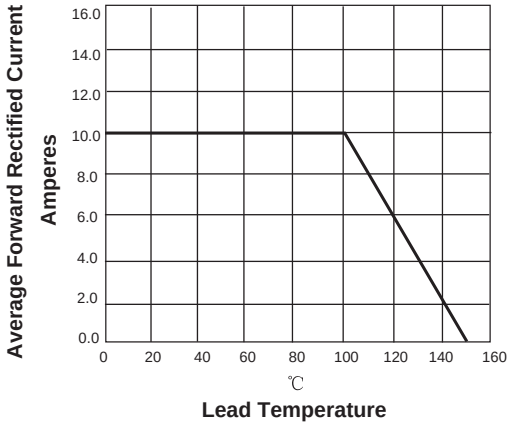


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

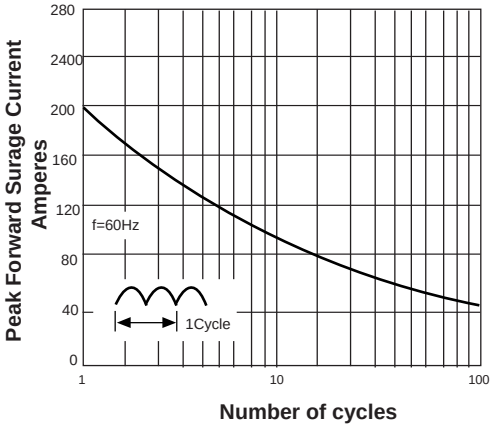


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

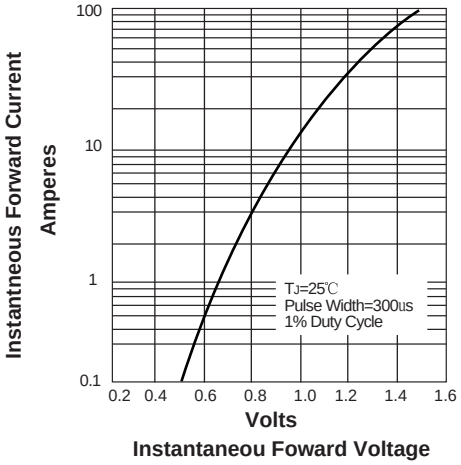
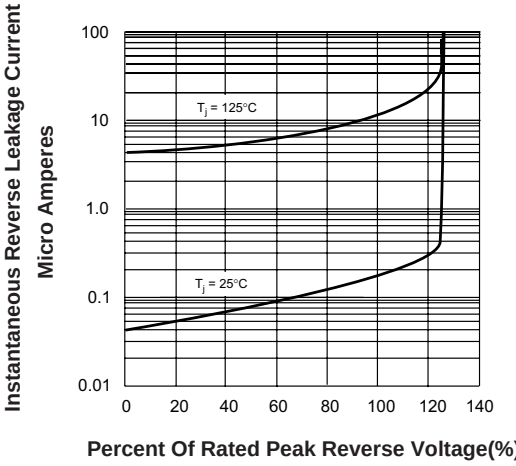
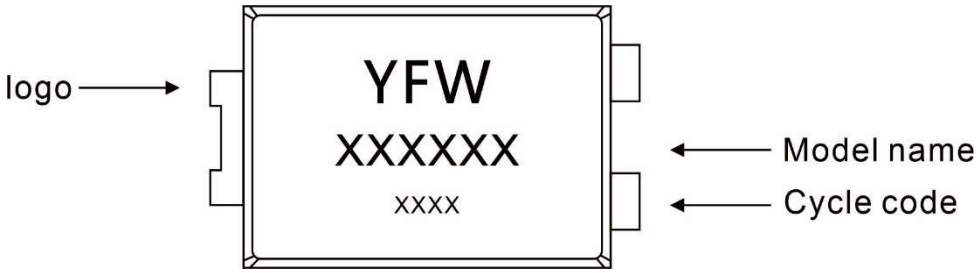


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram

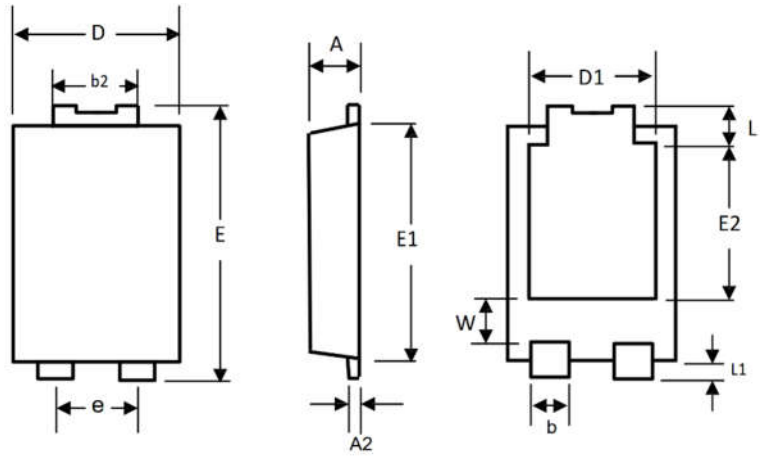


Ordering information

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

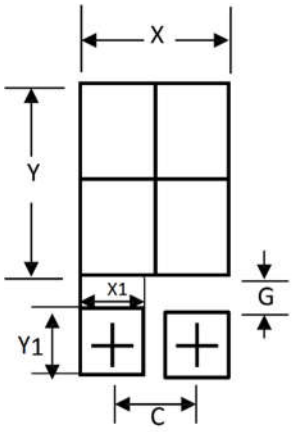
Package Dimensions

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

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