

Features

- ✧ UL Recognized File # E-326243
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ High case dielectric strength of 2000V_{RMS}
- ✧ Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- ✧ Typical IR less than 0.1uA
- ✧ High surge current capability to 200A
- ✧ High temperature soldering guaranteed: 260°C / 10 seconds at 5 lbs., (2.3kg) tension
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.



Mechanical Data

- ✧ Case: Molded plastic body
- ✧ Terminals: Pure tin plated, Lead free. Leads solderable per MIL-STD-202, Method 208
- ✧ Weight: 7.15 grams
- ✧ Mounting Torque : 8.17 in. lbs. Max.

Ordering Information (example)

Part No.	Package	Packing	Packing code	Green Compound Packing code
TS20P01G	TS6P	15 / TUBE	D2	D2G

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	Symbol	TS20P01G	TS20P02G	TS20P03G	TS20P04G	TS20P05G	TS20P06G	TS20P07G	Units
Maximum Recurrent 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	I _{F(AV)}	20							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	250							A
Rating of fusing (t < 8.3ms)	I ² t	259							A ² S
Maximum Instantaneous Forward Voltage @ 10 A (Note 1) @ 20 A	V _F	1.0 1.1							V
Maximum DC Reverse Current @ T _A =25 °C at Rated DC Blocking Voltage @ T _A =125 °C	I _R	10 500							uA uA
Typical Junction Capacitance Per Leg (Note 2)	C _j	140							pF
Typical Thermal Resistance	R _{θJC}	0.8							°C/W
Operating Temperature Range	T _J	- 55 to + 150							°C
Storage Temperature Range	T _{STG}	- 55 to + 150							°C

Note 1 : Pulse Test with PW=300 usec, 1% Duty Cycle

Note 2 : Measured at 1MHz and applied Reverse bias of 4.0V DC.

RATINGS AND CHARACTERISTIC CURVES (TS20P01G THRU TS20P07G)

FIG. 1 MAXIMUM DERATING CURVE FOR OUTPUT CURRENT

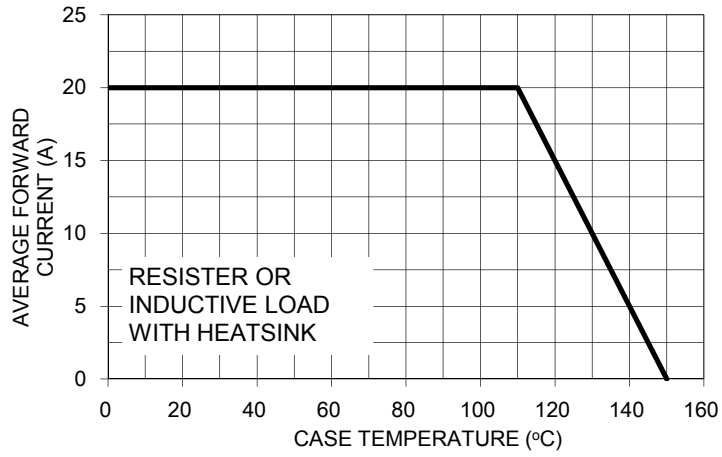


FIG. 2 MAXIMUM FORWARD SURGE CURRENT PER LEG

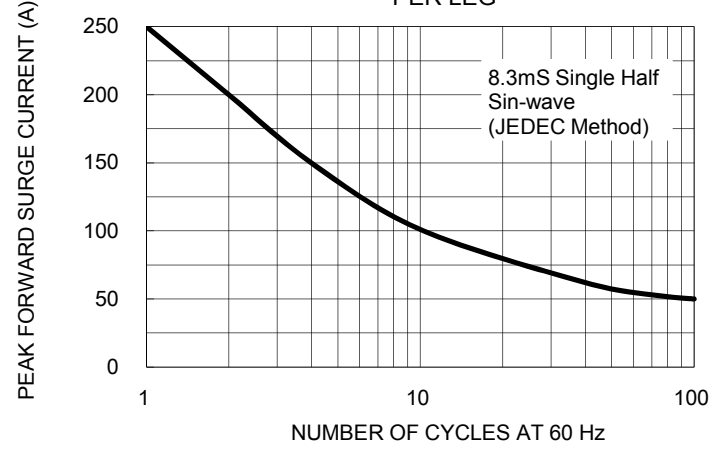


FIG. 3 TYPICAL REVERSE CHARACTERISTICS PER LEG

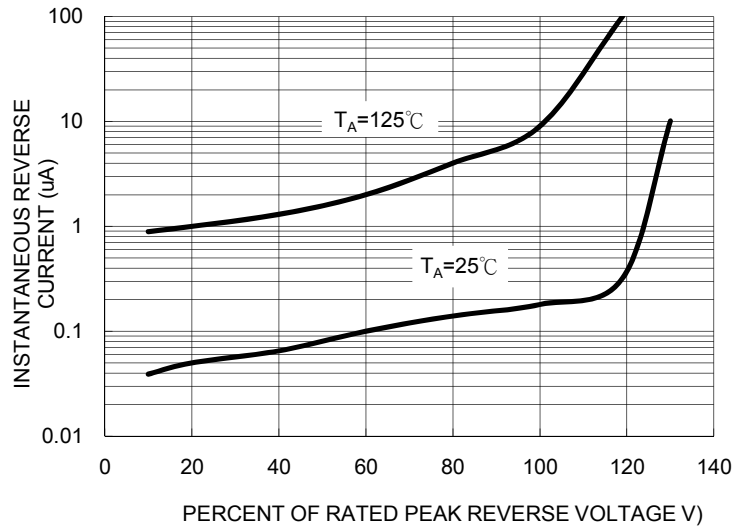


FIG. 4 TYPICAL FORWARD CHARACTERISTICS PER LEG

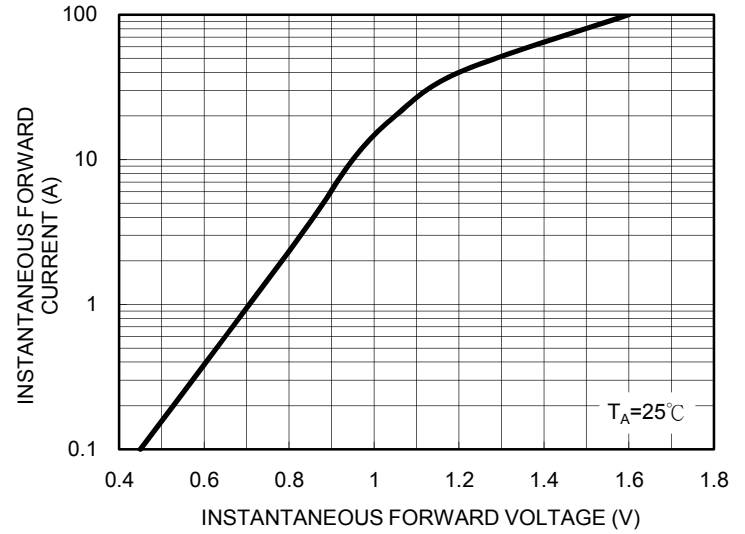
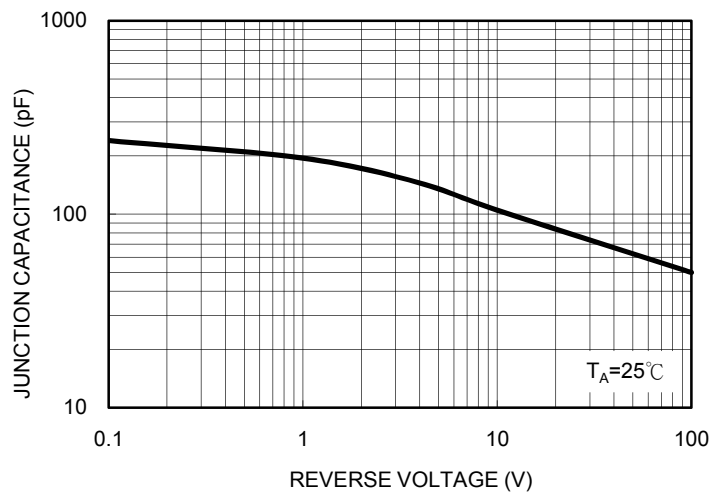


FIG. 5 TYPICAL JUNCTION CAPACITANCE



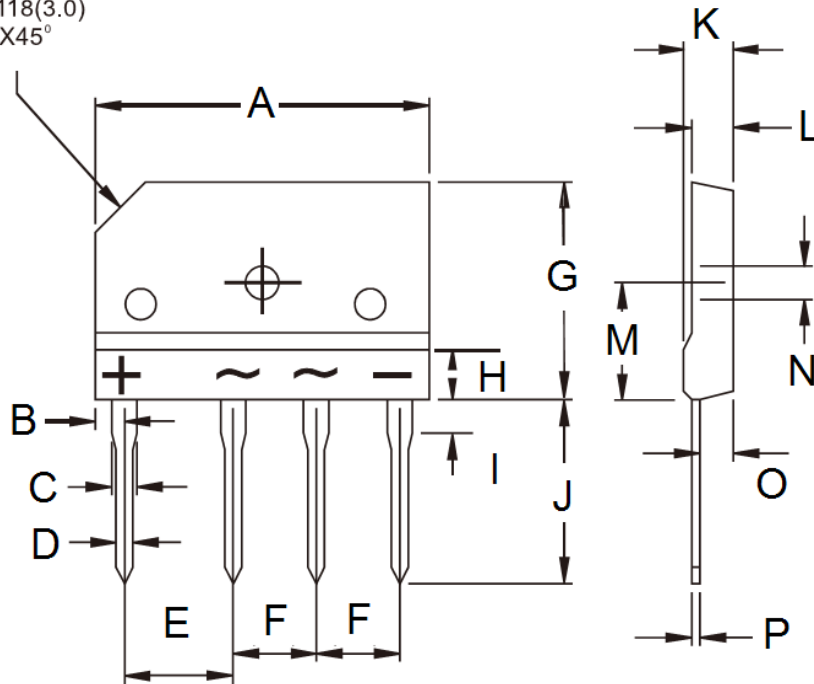
Ordering information

Part No.	Package	BULK Packing	Packing code	Green Compound Packing code
TS20P0xG	TS6P	15 / TUBE	D2	D2G
	TS6P	Forming	X2	X2G

Note: "x" is Device Code from "1" thru "7".

Dimensions

C .118(3.0)
X45°



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	29.70	30.30	1.169	1.193
B	2.30	2.70	0.091	0.106
C	2.00	2.40	0.079	0.094
D	0.90	1.10	0.035	0.043
E	9.80	10.20	0.386	0.402
F	7.30	7.70	0.287	0.303
G	19.70	20.30	0.776	0.799
H	-	4.80	-	0.189
I	3.80	4.20	0.150	0.165
J	17.00	18.00	0.669	0.709
K	4.40	4.80	0.173	0.189
L	3.40	3.80	0.134	0.150
M	10.80	11.20	0.425	0.441
N	3.10	3.40	0.122	0.134
O	2.50	2.90	0.098	0.114
P	0.60	0.70	0.024	0.028

Marking Diagram


P/N = Specific Device Code
 G = Green Compound
 YWW = Date Code