

**SUPER FAST
GLASS PASSIVATED RECTIFIERS**

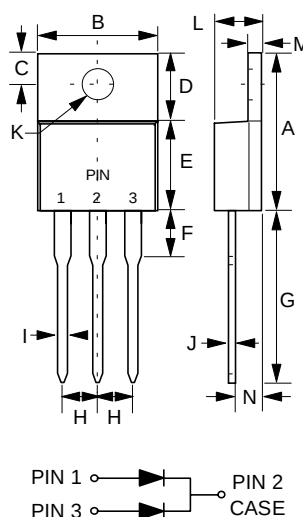
REVERSE VOLTAGE - **100 to 200** Volts
FORWARD CURRENT - **10** Amperes

FEATURES

- Glass passivated chip
- Superfast switching time for high efficiency
- Low forward voltage drop and high current capability
- Low reverse leakage current
- High surge capacity
- Plastic package has UL flammability classification 94V-0

MECHANICAL DATA

- Case : TO-220AB molded plastic
- Polarity : As marked on the body
- Weight : 0.08 ounces, 2.24 grams
- Mounting position : Any

TO-220AB


TO-220AB		
DIM.	MIN.	MAX.
A	14.22	15.88
B	9.65	10.67
C	2.54	3.43
D	5.84	6.86
E	8.26	9.28
F	-	6.35
G	12.70	14.73
H	2.29	2.79
I	0.51	1.14
J	0.30	0.64
K	3.53 $\varnothing$	4.09 $\varnothing$
L	3.56	4.83
M	1.14	1.40
N	2.03	2.92

All Dimensions in millimeter

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, derate current by 20%

CHARACTERISTICS	SYMBOL	STPR1010CT	STPR1020CT	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	100	200	V
Maximum RMS Voltage	VRMS	70	140	V
Maximum DC Blocking Voltage	VDC	100	200	V
Maximum Average Forward Rectified Current @TC=125°C	l(AV)	10		A
Non Repetitive Peak Forward Surge Current Per Diode TP=10ms	IFSM	50		A
Sinusoidal (JEDEC Method) TP=8.3ms		55		
Maximum forward Voltage IF=5A@TJ =25°C Pulse Width =300us Duty cycle IF=5A@TJ =125°C IF=10A@TJ =25°C IF=10A@TJ =125°C	VF	0.975 0.925 1.25 1.20	V	
Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ =25°C @TJ =100°C	IR	5 100	uA	
Typical Junction Capacitance per element (Note 1)	CJ	80	pF	
Maximum Reverse Recovery Time (Note 2)	TRR	30	ns	
Typical Thermal Resistance	RθJC	4.0	°C/W	
Operating and Storage Temperature Range	TJ ,TSTG	-55 to +150		°C

NOTES : 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Reverse Recovery Test Conditions: IF=0.5A, IR=1.0A, IRR 0.25A.

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FIG.1 - FORWARD CURRENT DERATING CURVE

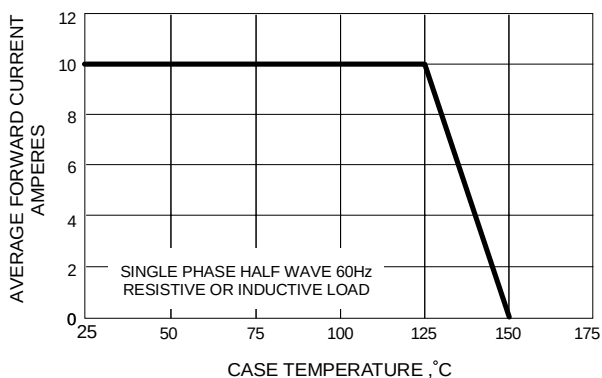


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

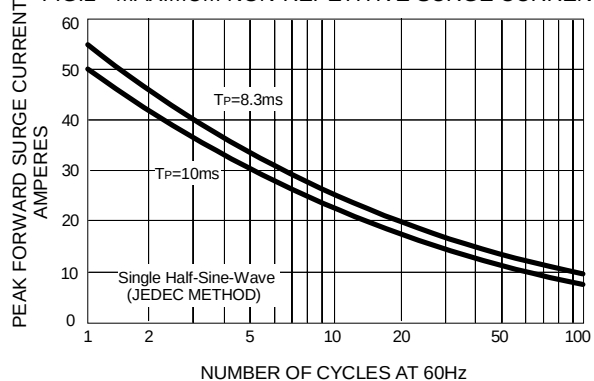


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

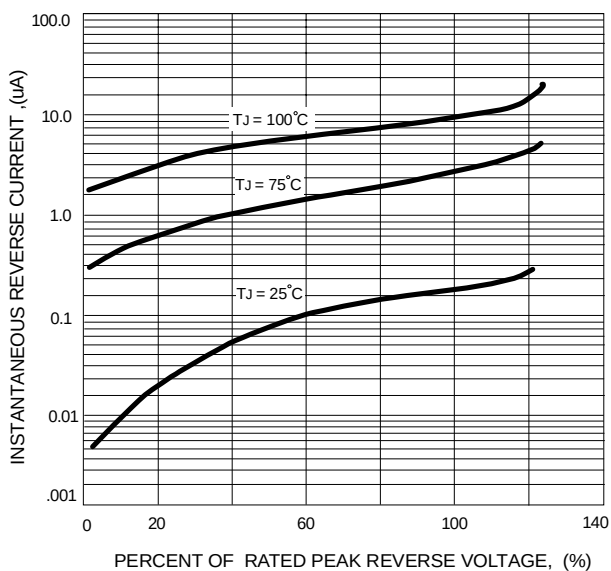


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

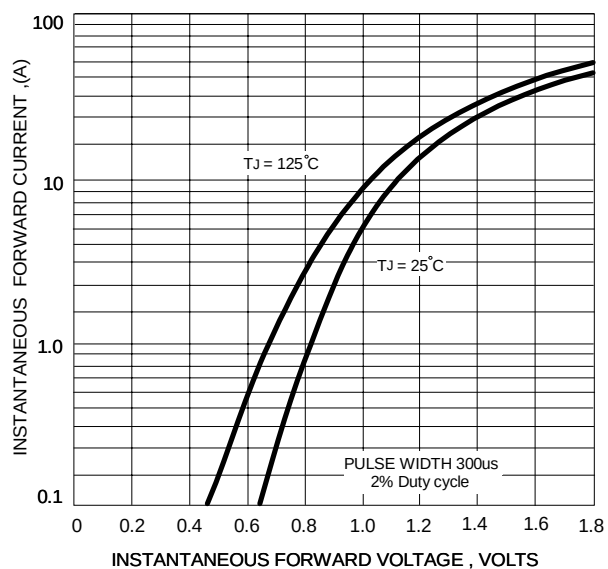


FIG.5 - TYPICAL JUNCTION CAPACITANCE

