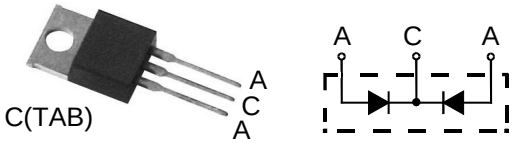
STPRF1605CT thru STPRF1620CT

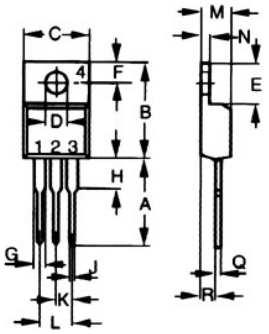
Ultra Fast Recovery Diodes



A=Anode, C=Cathode, TAB=Cathode

	V_{RRM} V	V_{RMS} V	V_{DC} V
STPRF1605CT	50	35	50
STPRF1610CT	100	70	100
STPRF1615CT	150	105	150
STPRF1620CT	200	140	200

Dimensions TO-220AB



Dim.	Inches Min.	Inches Max.	Milimeter Min.	Milimeter Max.
A	0.500	0.550	12.70	13.97
B	0.580	0.630	14.73	16.00
C	0.390	0.420	9.91	10.66
D	0.139	0.161	3.54	4.08
E	0.230	0.270	5.85	6.85
F	0.100	0.125	2.54	3.18
G	0.045	0.065	1.15	1.65
H	0.110	0.230	2.79	5.84
J	0.025	0.040	0.64	1.01
K	0.100	BSC	2.54	BSC
M	0.170	0.190	4.32	4.82
N	0.045	0.055	1.14	1.39
Q	0.014	0.022	0.35	0.56
R	0.090	0.110	2.29	2.79

Symbol	Characteristics	Maximum Ratings	Unit
$I_{(AV)}$	Maximum Average Forward Rectified Current @T_C=100°C	16	A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half-Sine-Wave Superimposed On Rated Load (JEDEC METHOD)	125	A
V_F	Maximum Forward Voltage At 8.0A DC	0.95	V
I_R	Maximum DC Reverse Current @T_J=25°C At Rated DC Blocking Voltage @T_J=100°C	5 500	uA
C_J	Typical Junction Capacitance Per Element (Note 1)	110	pF
T_{RR}	Maximum Reverse Recovery Time (Note 2)	35	ns
$R_{\theta JC}$	Typical Thermal Resistance (Note 3)	1.5	°C/W
T_J, T_{STG}	Operating And Storage Temperature Range	-55 to +150	°C

NOTES: 1. Measured At 1.0MHz And Applied Reverse Voltage Of 4.0V DC.
2. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.
3. Thermal Resistance Junction To Case.

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

MECHANICAL DATA

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

STPRF1605CT thru STPRF1620CT

Ultra Fast Recovery Diodes

FIG.1 - FORWARD CURRENT DERATING CURVE

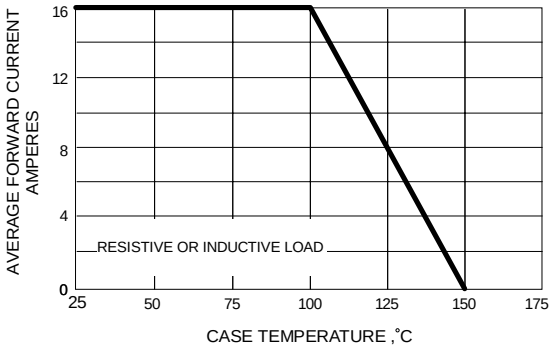


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

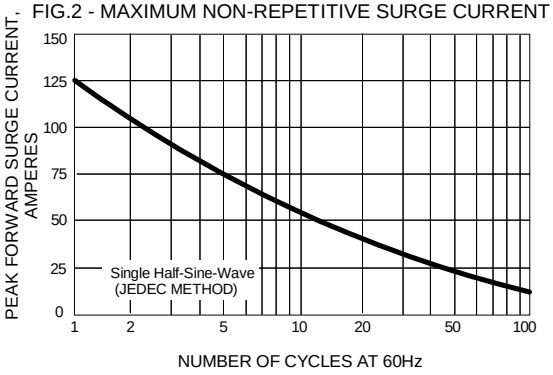


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

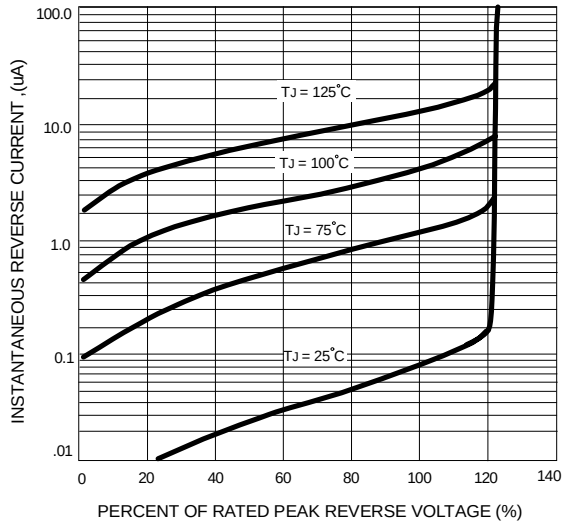


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

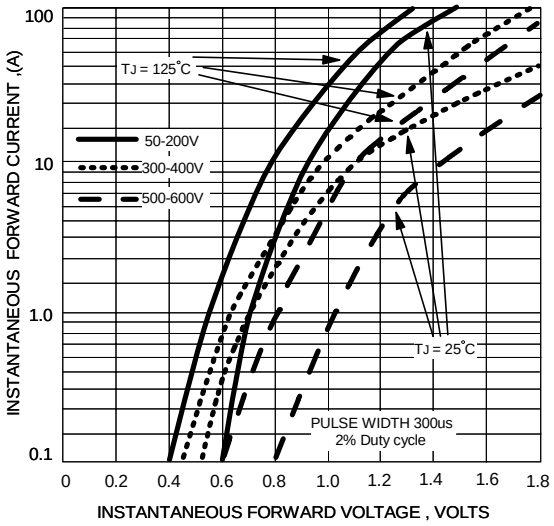


FIG.5 - TYPICAL JUNCTION CAPACITANCE

