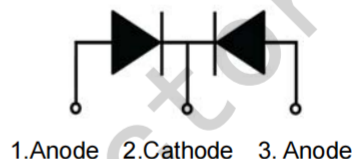
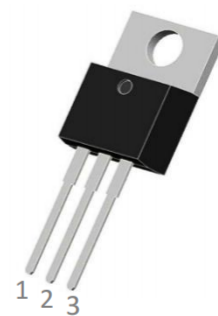


Features:

- ☐ High surge capacity
- ☐ Low Forward Voltage Drop
- ☐ High Current Capability
- ☐ SuperFastSwitchingSpeedForHighEfficiency


Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

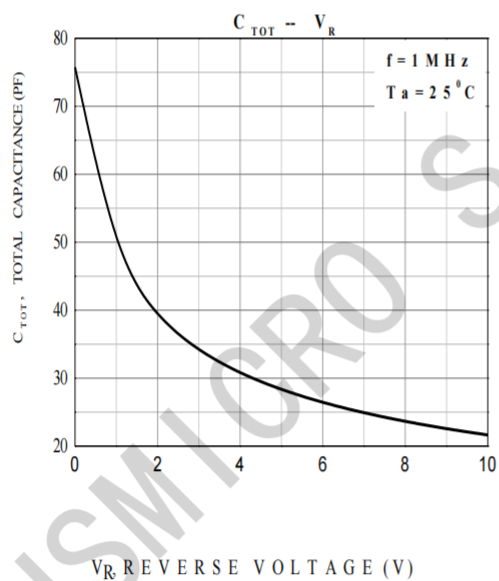
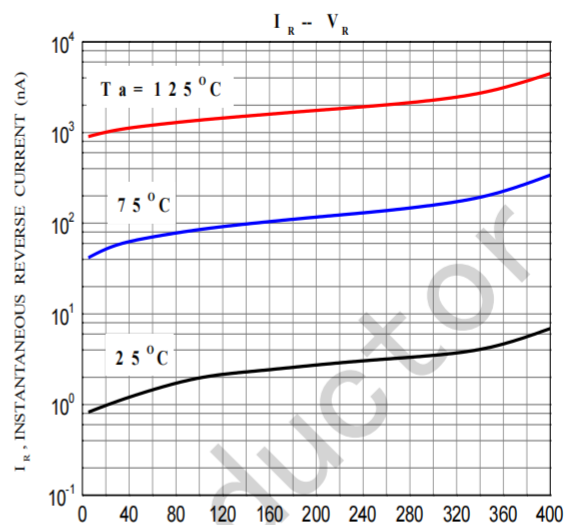
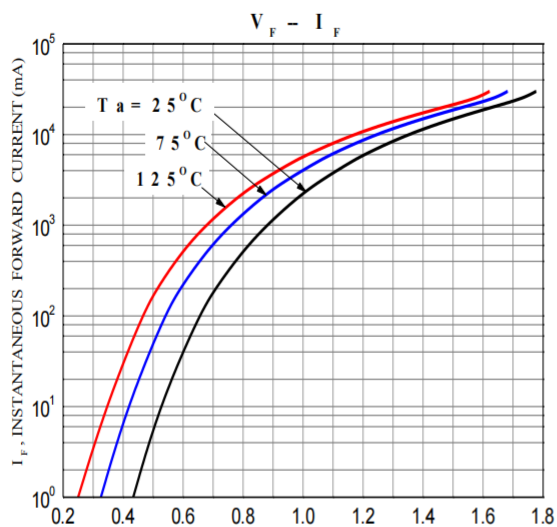
Parameter	Symbol	F20C05C	F20C10C	F20C15C	F20C20C	F20C30C	F20C40C	F20C60C	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	$V_{R(DC)}$	50	100	150	200	300	400	600	V
Average Rectified Forward Current Total Device, (Rated V_R),	$I_{F(AV)}$	20							A
Nonrepetitive Peak Surge Current(Surge applied at rated load conditions half wave, single phase, 60 Hz)	I_{FSM}	200							A
Operating Junction Temperature and Storage Temperature	TJ, Tstg	-55 to +155							°C
Maximum Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	3.0				2.0			°C/W

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	F20C05C	F20C10C	F20C15C	F20C20C	F20C30C	F20C40C	F20C60C	Unit
Forward Voltage (Note 1) (I _F = 20A, T _C = 25°C) (I _F = 20 A, T _C = 125°C)	V _F	0.975 0.895				1.35 1.15		1.70 1.50	V
Maximum Instantaneous Reverse Current (Note 1) (Rated DC Voltage, T _C = 25°C) (Rated DC Voltage, T _C = 125°C)	I _R	5 250				10 500			μ A
Maximum Reverse Recovery Time (I _F = 0.5 A, I _R = 1.0 A, I _{REC} = 0.25 A)	T _{RR}	35							ns

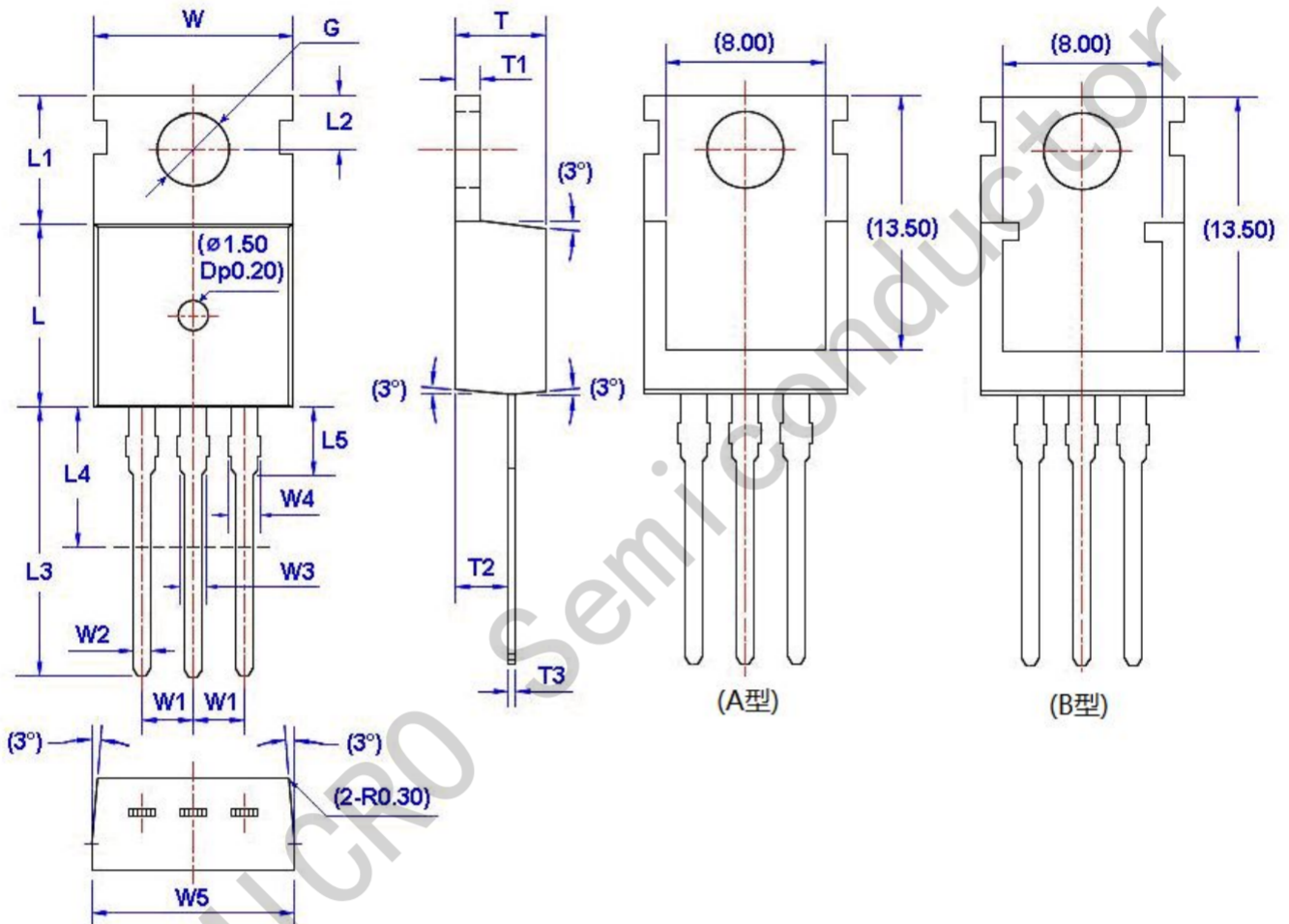
Note 1.Pulse Test: Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$

Typical Characteristics



Package Information

TO-220



Unit: mm

Symbol	Size		Symbol	Size		Symbol	Size		Symbol	Size	
	Min	Max		Min	Max		Min	Max		Min	Max
W	9.66	10.28	W5	9.80	10.20	L4**	6.20	6.60	T3	0.45	0.60
W1	2.54 (TYP)		L	9.00	9.40	L5	2.79	3.30	G(Φ)	3.50	3.70
W2	0.70	0.95	L1	6.40	6.80	T	4.30	4.70			
W3	1.17	1.37	L2	2.70	2.90	T1	1.15	1.40			
W4*	1.32	1.72	L3	12.70	14.27	T2	2.20	2.60			