/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-60	V
Collector to Emitter Voltage	V_{CEO}	-50	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-3.0	A
Peak Collector Current	I_{CP}	-4.5	A
Collector Power Dissipation	P_C	2.0	W
Collector Power Dissipation	P_C(TC=25)	25	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

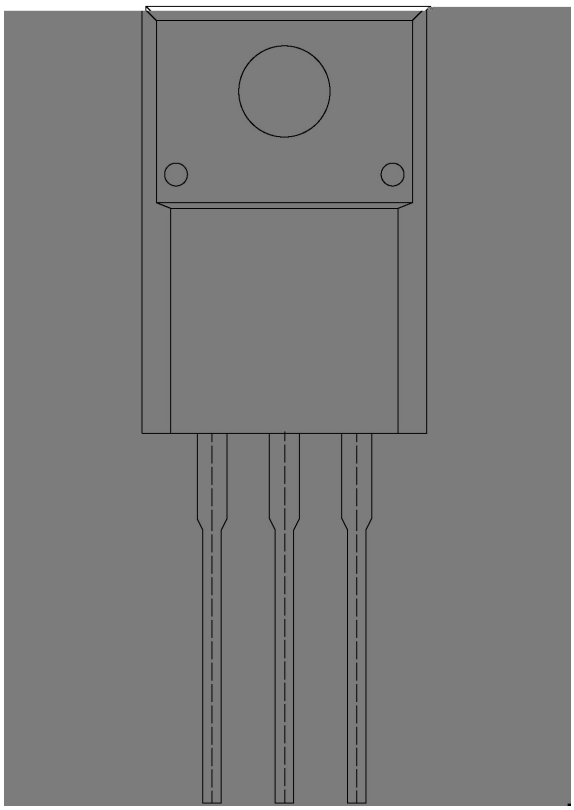
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=-50μA I_E=0	-60			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=-1.0mA I_B=0	-50			V
Emitter to Base Breakdown Voltage	V_{EBO}	I_E=-50μA I_C=0	-5.0			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-40V I_E=0			-1.0	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-4.0V I_C=0			-1.0	μA
DC Current Gain	h_{FE}	V_{CE}=-3.0V I_C=-0.5A	60		320	
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-2.0A I_B=-0.2A			-1.0	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-2.0A I_C=-0.2A			-1.5	V
Transition Frequency	f_T	I_C=-0.5A V_{CE}=-5.0V f=30MHz		70		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V I_E=0 f=1.0MHz		50		pF

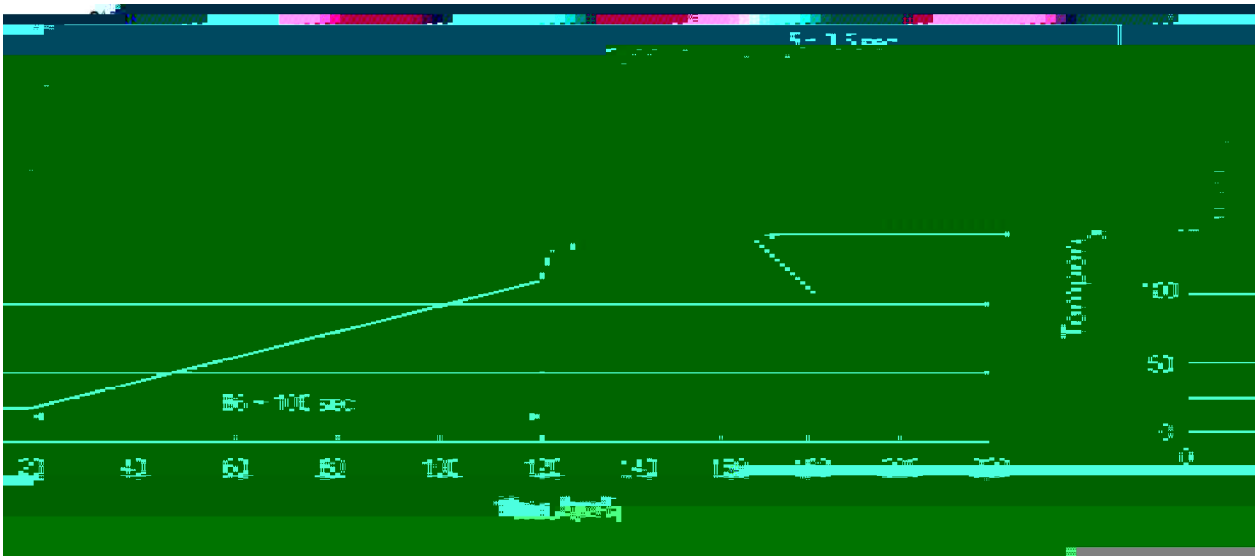
/ Electrical Characteristic Curve

/ Package Dimensions





( ) / Temperature Profile for Dip Soldering(Pb-Free)



					Note:
1		25 150		60 90sec;	1.Preheating:25~150 , Time:60~90sec.
2		255±5		5±0.5sec;	2.Peak Temp.:255±5 , Duration:5±0.5sec.
3			2 10 /sec.		3. Cooling Speed: 2~10 /sec.

/ Resistance to Soldering Heat Test Conditions

270±5	10±1 sec.	Temp.:270±5	Time:10±1 sec

/ Packaging SPEC.

/ BULK

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Bag 只/袋	Bags/Inner Box 袋/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Bag 袋	Inner Box 盒	Outer Box 箱
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Tube 只/套管	Tubes/Inner Box 套管/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Tube 套管	Inner Box 盒	Outer Box 箱
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices