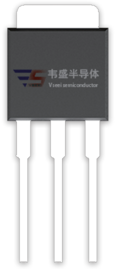
MJD3055 TRANSISTOR (NPN)



TO-251

FEATURES

- Designed for General Purpose Amplifier an d Low Speed Switching Applications
- Electrically Simiar to MJE3055
- DC Current Gain Specified to10A

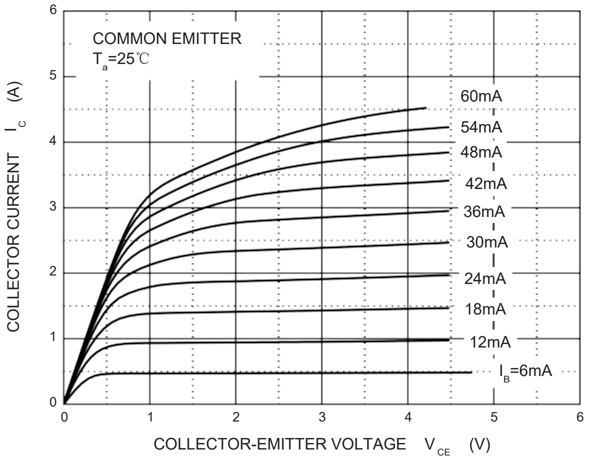
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	70	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	10	A
P_C	Collector Power Dissipation	1.25	W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

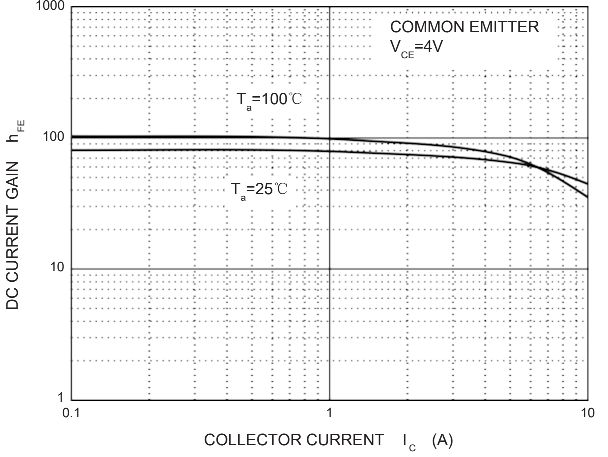
ELECTRICAL CHARA CTERISTICS (T_a= 25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	Ic=1mA,I_E=0	70			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	Ic=200 mA,I_B=0	60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=1mA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=70V,I_E=0			0.02	mA
	I_{CEO}	V_{CB}=30V,I_B=0			50	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			0.5	mA
DC current gain	$h_{FE(1)}$	V_{CE}=4V,I_C=4A	20		100	
	$h_{FE(2)}$	V_{CE}=4V,I_C=10A	5			
Collector-emitter saturation voltage	$V_{CE(sat)(1)}$	I_C=4A, I_B=0.4A			1.1	V
	$V_{CE(sat)(2)}$	I_C=10A, I_B=3.3A			8	V
Base-emitter voltage	V_{BE}	V_{CE}=4V, I_C=4A			1.8	V
Transition frequency	f_T	V_{CE}=10V,I_C=0.5A,f=500KH_Z	2			MHz

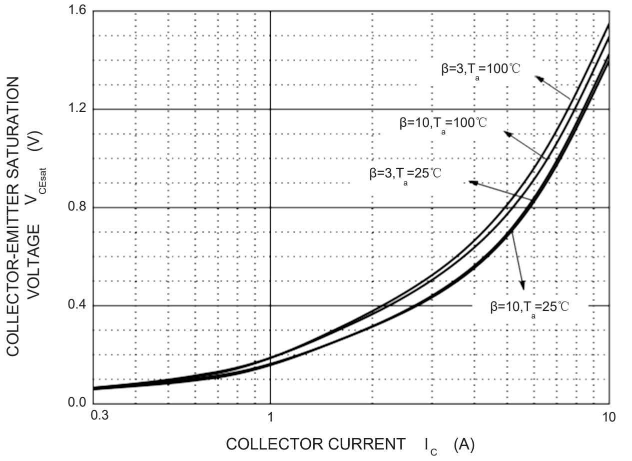
Static Characteristic



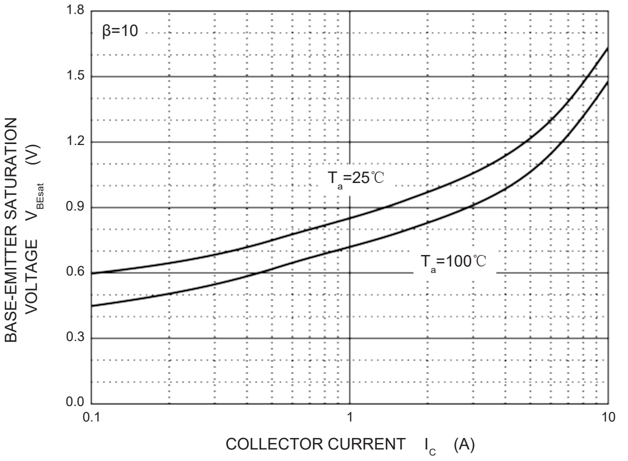
h_{FE} — I_C



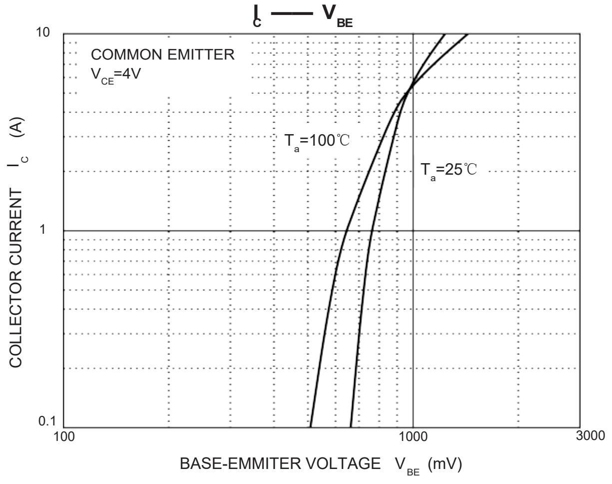
V_{CEsat} — I_C



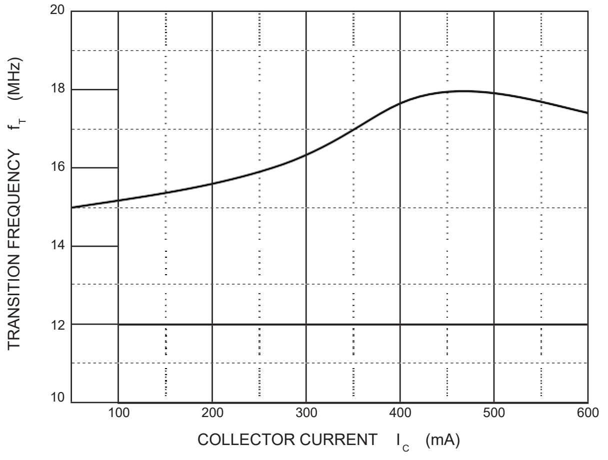
V_{BEsat} — I_C



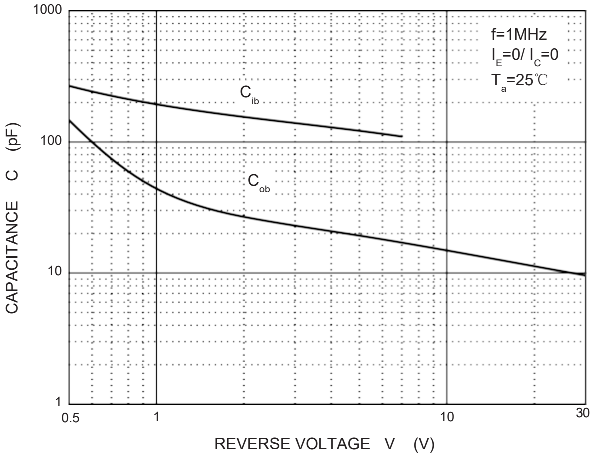
I_C — V_{BE}



f_T — I_C



C_{ob}/ C_{ib} — V_{CB}/ V_{EB}



P_C — T_a