

Electrical Characteristics @ $T_A=25^\circ\text{C}$ Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Units	Conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	25			V	$I_C=100\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	18			V	$I_C=1\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	4			V	$I_E=100\mu\text{A}, I_C=0$
Collector-Base Cutoff Current	I_{CBO}			0.1	μA	$V_{CB}=20\text{V}, I_E=0$
Collector Cutoff Current	I_{CEO}			0.1	μA	$V_{CE}=15\text{V}, I_B=0$
Emitter-Base Cutoff Current	I_{EBO}			0.1	μA	$V_{EB}=3\text{V}, I_C=0$
DC Current Gain	h_{FE}	70		190		$V_{CE}=5\text{V}, I_C=1\text{mA}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			0.5	V	$I_C=10\text{mA}, I_B=1\text{mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}$			1.4	V	$I_C=10\text{mA}, I_B=1\text{mA}$
Transition Frequency	f_T	600			MHz	$V_{CE}=5\text{V}, I_C=5\text{mA}, f=400\text{MHz}$

Classification of h_{FE}

Rank	L	H
Range	70-105	105-190

Curve Characteristics

Fig. 1 - Static Characteristics

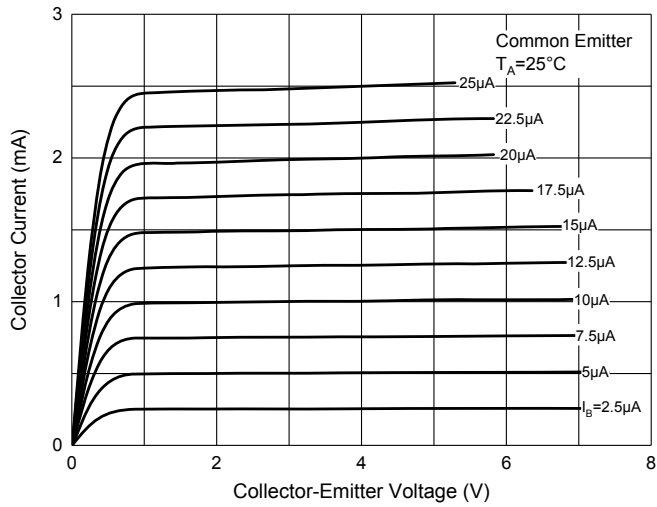


Fig. 2 - DC Current Gain Characteristics

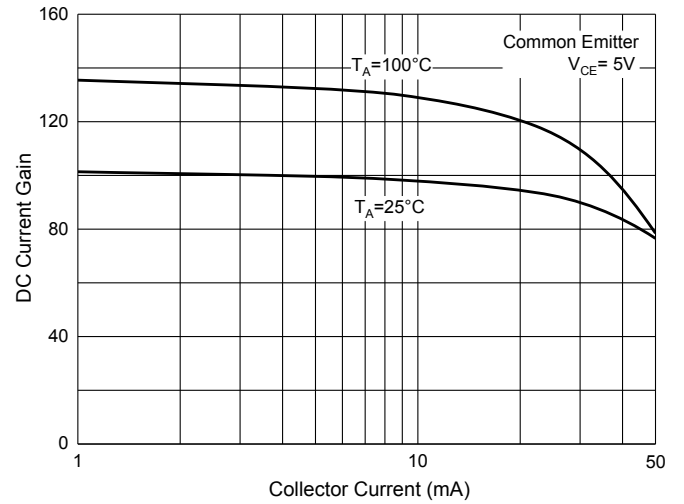


Fig. 3 - Collector-Emitter Saturation Voltage Characteristics

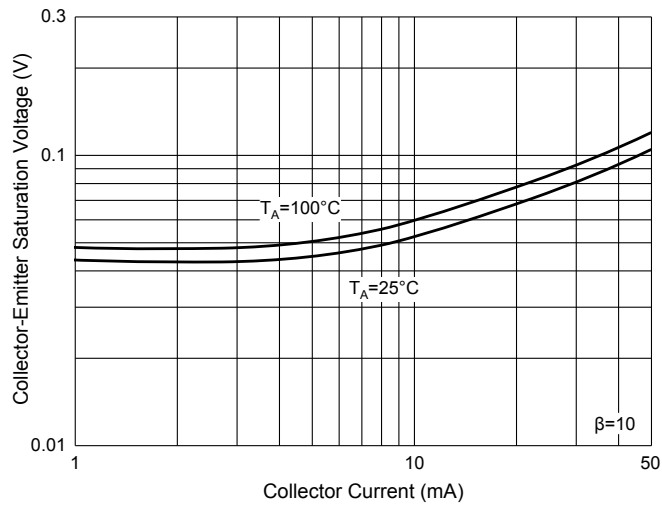


Fig. 4 - Base-Emitter Saturation Voltage Characteristics

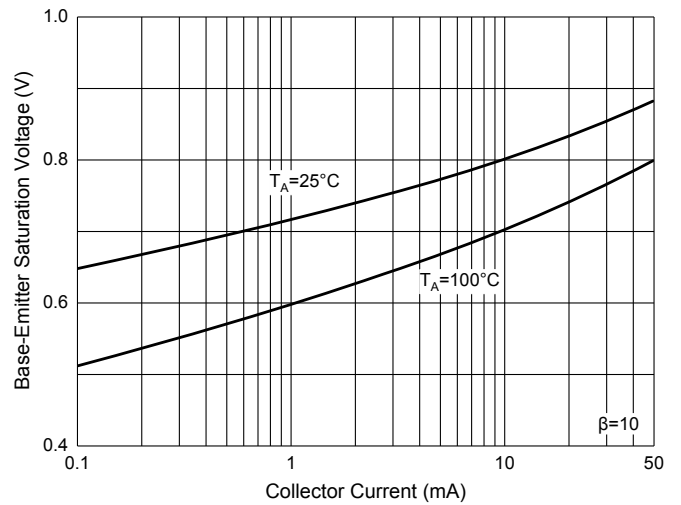


Fig. 5 - Base-Emitter Voltage Characteristics

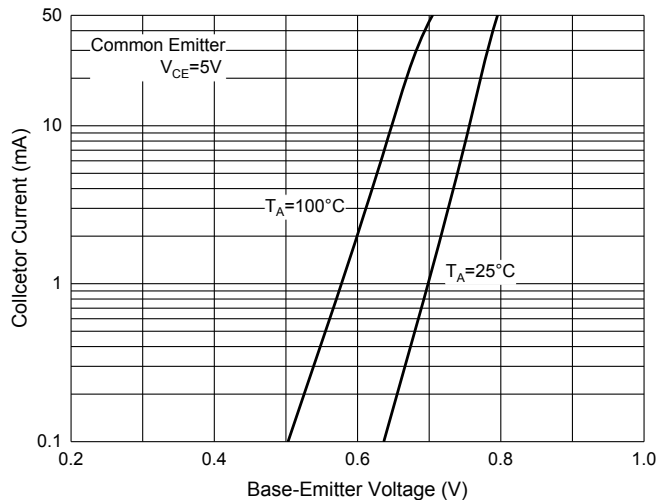
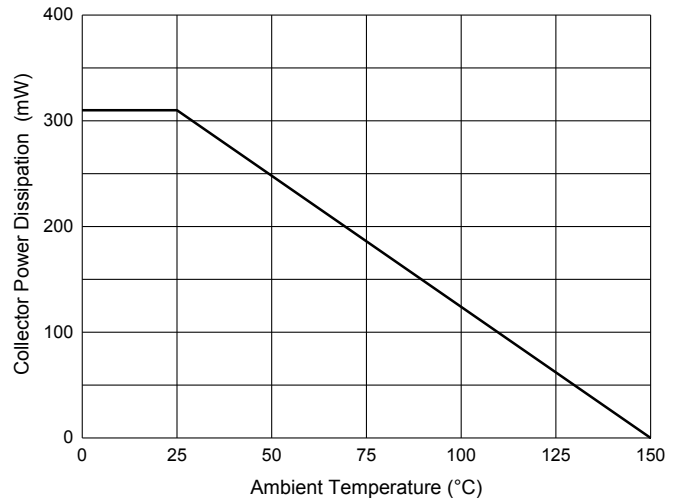


Fig. 6 - Collector Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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