

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

Parameter	Symbol	Min	Typ	Max	Units	Conditions
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	100			V	$I_C=1\text{mA}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	100			V	$I_C=30\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5			V	$I_E=5\text{mA}, I_C=0$
Collector Cutoff Current	I_{CBO}			20	μA	$V_{CB}=100\text{V}, I_E=0$
Collector Cutoff Current	I_{CEO}			20	μA	$V_{CE}=50\text{V}, I_B=0$
Emitter Cutoff Current	I_{EBO}			2	mA	$V_{EB}=5\text{V}, I_C=0$
DC Current Gain	$h_{FE(1)}$	500				$V_{CE}=3\text{V}, I_C=0.5\text{A}$
	$h_{FE(2)}$	1000		12000		$V_{CE}=3\text{V}, I_C=2\text{A}$
	$h_{FE(3)}$	200				$V_{CE}=3\text{V}, I_C=4\text{A}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			2.0	V	$I_C=2\text{A}, I_B=8\text{mA}$
				3.0	V	$I_C=4\text{A}, I_B=40\text{mA}$
Base-Emitter Voltage	V_{BE}			2.8	V	$V_{CE}=3\text{V}, I_C=2\text{A}$
Transition Frequency	f_T	25			MHz	$V_{CE}=10\text{V}, I_C=0.75\text{A}, f=1\text{MHz}$
Output Capacitance	C_{ob}			100	pF	$V_{CB}=10\text{V}, I_E=0, f=0.1\text{MHz}$

Curve Characteristics

Fig. 1 - Static Characteristics

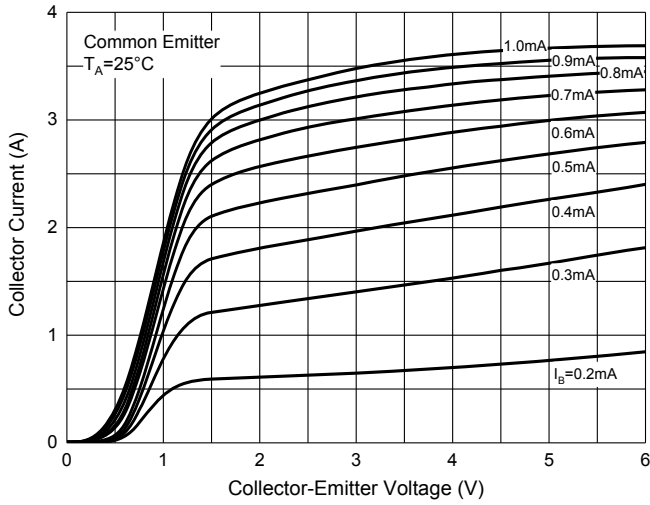


Fig. 2 - DC Current Gain Characteristics

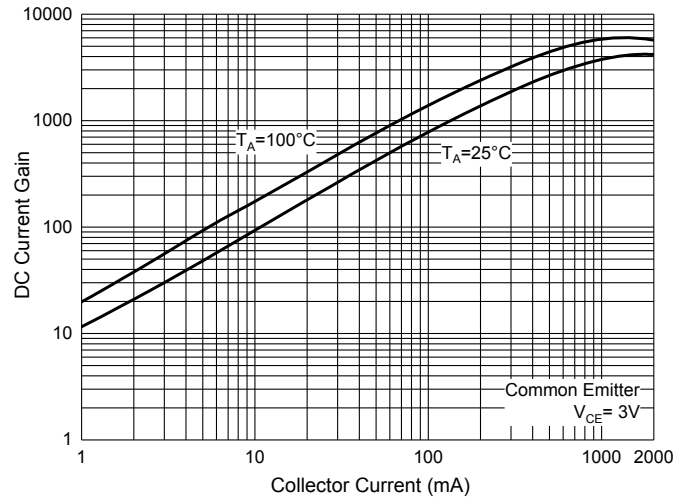


Fig. 3 - Collector-Emitter Saturation Voltage Characteristics

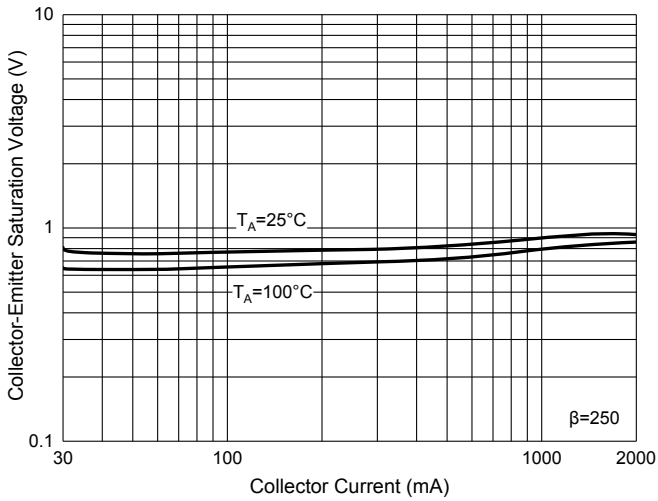


Fig. 4 - Collector-Emitter Saturation Voltage Characteristics

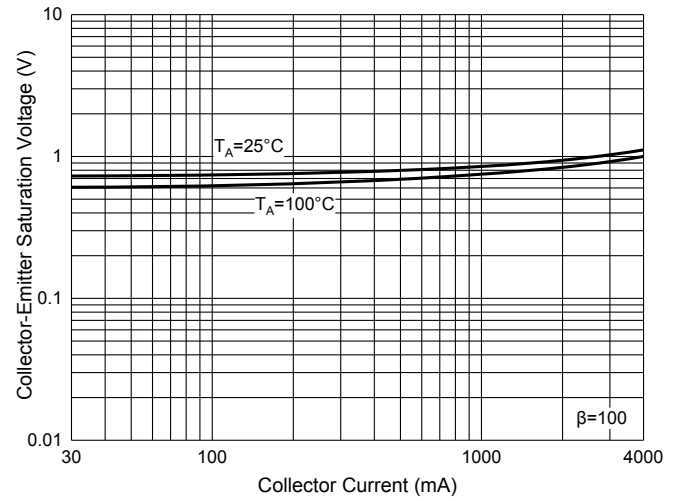


Fig. 5 - Base-Emitter Voltage Characteristics

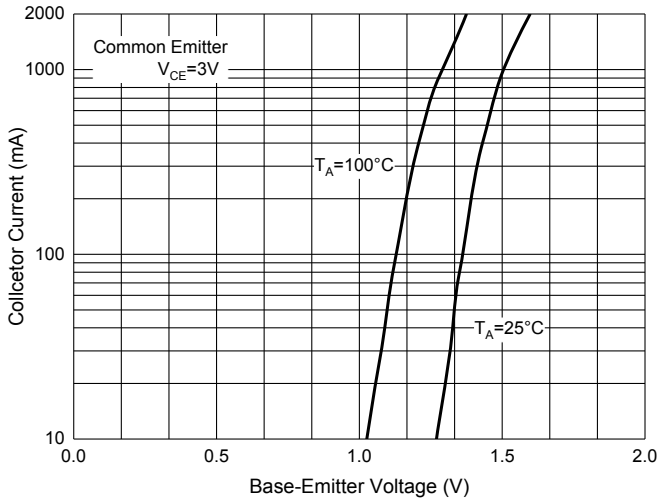
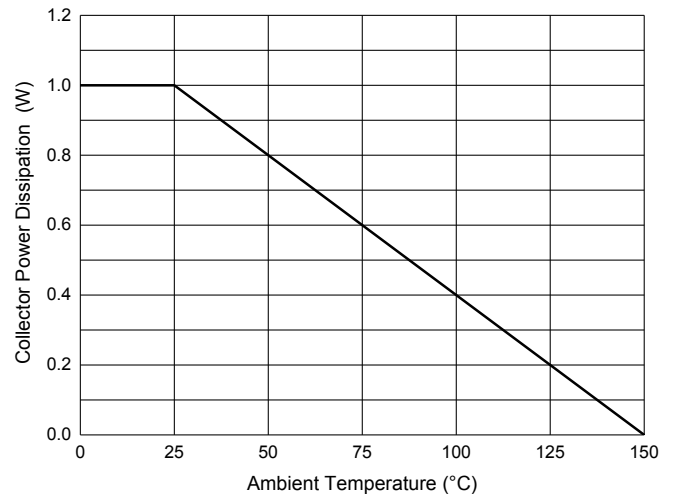


Fig. 6 - Collector Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

Note : Adding "-HF" Suffix for Halogen Free, eg. Part Number-TP-HF

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