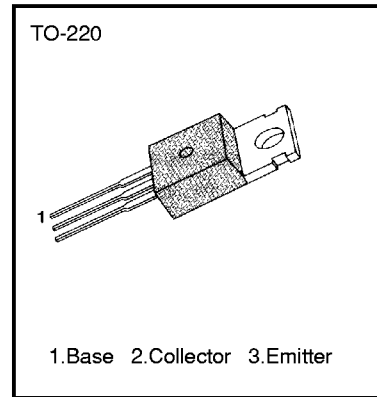


PNP EPITAXIAL TIP115/116/117 SILICON DARLINGTON TRANSISTOR

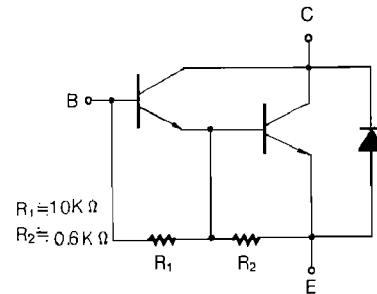
HIGH DC CURRENT GAIN
MIN $h_{FE}=1000$ @ $V_{CE}=-4V, I_C=-1A$
LOW COLLECTOR-EMITTER
SATURATION VOLTAGE
MONOLITHIC CONSTRUCTION WITH BUILT
IN BASE-EMITTER SHUNT RESISTORS
INDUSTRIAL USE

• Complementary to TIP110/111/112



ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit
Collector Base Voltage :TIP115	V_{CBO}	-60	V
: TIP116		-80	V
: TIP117		-100	V
Collector Emitter Voltage			
:TIP115	V_{CEO}	-60	V
:TIP116		-80	V
:TIP117		-100	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current (DC)	I_C	-2	A
Collector Current (Pulse)	I_C	-4	A
Base Current (DC)	I_B	-50	mA
Collector Dissipation ($T_A=25^\circ C$)	P_C	2	W
Collector Dissipation ($T_C=25^\circ C$)	P_C	50	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature	T_{STG}	-65 ~ 150	$^\circ C$

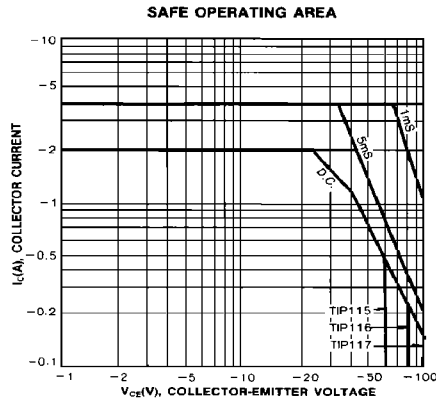
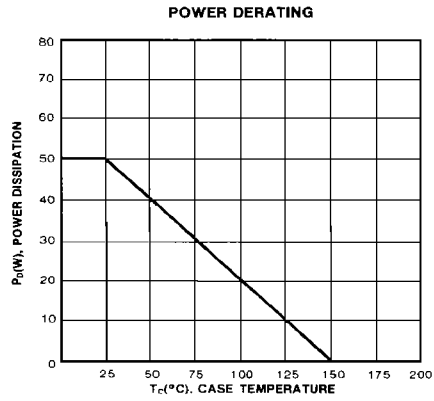
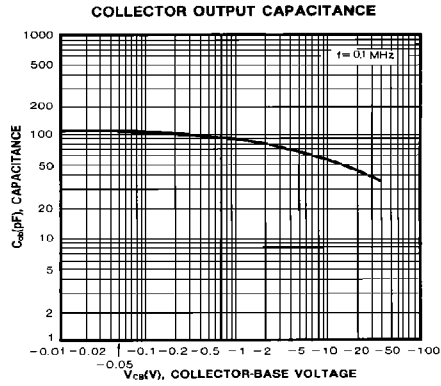
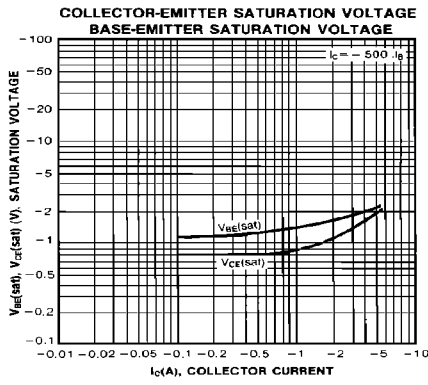
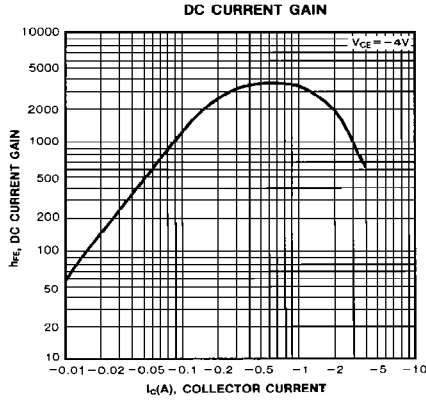
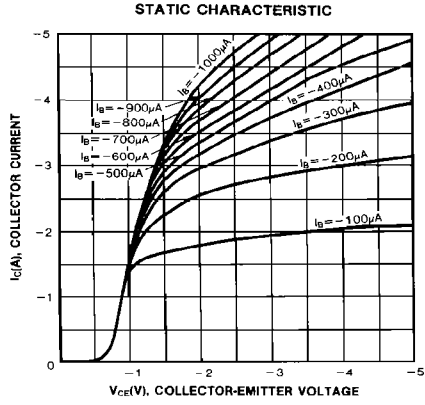


Electrical Characteristics Directory

ELECTRICAL CHARACTERISTICS ($T_C=25^\circ C$)

Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector Emitter Sustaining Voltage	$V_{CE0(sus)}$	$I_C = -30mA, I_B = 0$			
: TIP115			-60		V
: TIP116			-80		V
: TIP117			-100		V
Collector Cutoff Current	I_{CEO}	$V_{CE} = -30V, I_B = 0$		-2	mA
: TIP115		$V_{CE} = -40V, I_B = 0$		-2	mA
: TIP116		$V_{CE} = -50V, I_B = 0$		-2	mA
: TIP117		$V_{CB} = -60V, I_E = 0$		-1	mA
Collector Cutoff Current	I_{CBO}	$V_{CB} = -80V, I_E = 0$		-1	mA
: TIP115		$V_{CB} = -100V, I_E = 0$		-1	mA
: TIP116				-2	mA
: TIP117				-2	mA
Emitter Cutoff Current	I_{EBO}	$V_{BE} = -5V, I_C = 0$		-2	mA
DC Current Gain	h_{FE}	$V_{CE} = -4V, I_C = -1A$	1000		
		$V_{CE} = -4V, I_C = -2A$	500		
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -2A, I_B = -8mA$		-2.5	V
Base Emitter On Voltage	$V_{BE(on)}$	$V_{CE} = -4V, I_C = -2A$		-2.8	V
Output Capacitance	C_{OB}	$V_{CB} = -10V, I_E = 0, f = 0.1MHz$		200	pF

NPN EPITAXIAL TIP115/116/117 SILICON DARLINGTON TRANSISTOR



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