

FEATURES

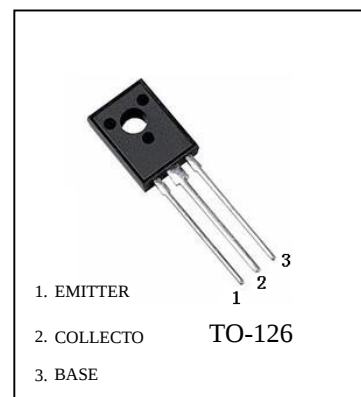
Power dissipation

MARKING:882

MAXIMUM RATINGS (TA=25 °C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	3000	mA
Collector Power Dissipation	P_C	1250	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55-150	°C

D882 (NPN)



ELECTRICAL CHARACTERISTICS (Tamb=25 °C unless otherwise specified)

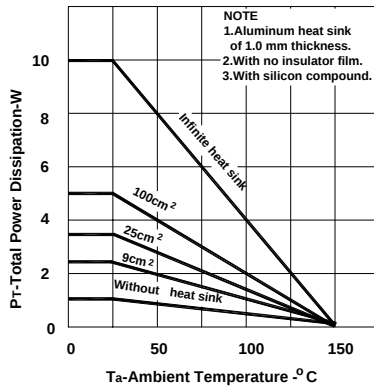
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C = 100\mu A, I_E = 0$	40			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = 10mA, I_B = 0$	30			V
Emitter-base breakdown voltage	V_{EBO}	$I_E = 100\mu A, I_C = 0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB} = 40 V, I_E = 0$			1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = 30 V, I_B = 0$			10	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 6 V, I_C = 0$			1	μA
DC current gain	h_{FE}	$V_{CE} = 2 V, I_C = 1A$	60		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 2A, I_B = 0.2 A$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 2A, I_B = 0.2 A$			1.5	V
Transition frequency	f_T	$V_{CE} = 5V, I_C = 0.1A, f = 10MHz$		90		MHz

CLASSIFICATION OF HFE

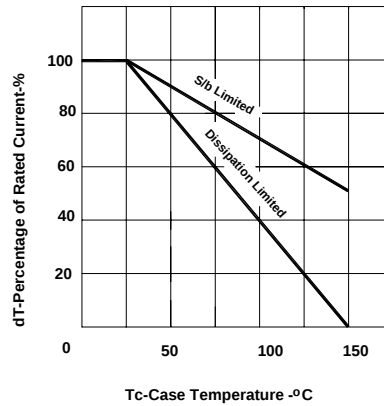
Ran	R	O	Y	GR
Rang	60-120	100-200	160-320	200-400

D882 Typical Characteristics

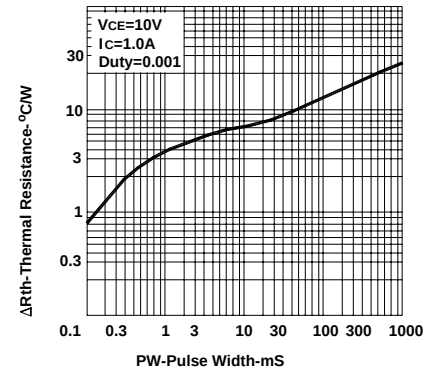
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



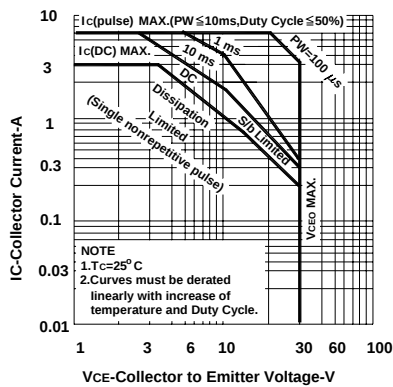
DERATING CURVES FOR ALL TYPES



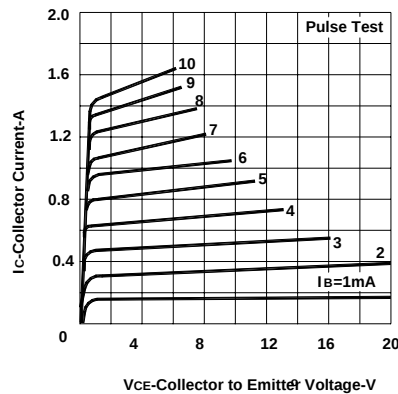
THERMAL RESISTANCE vs. PULSE WIDTH



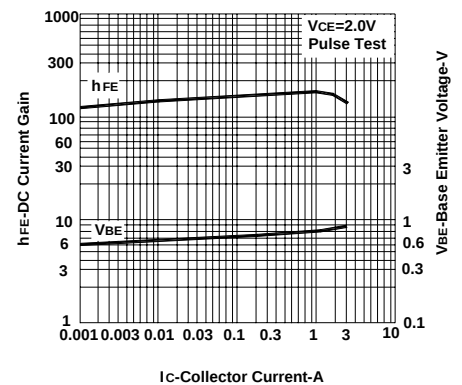
SAFE OPERATING AREAS



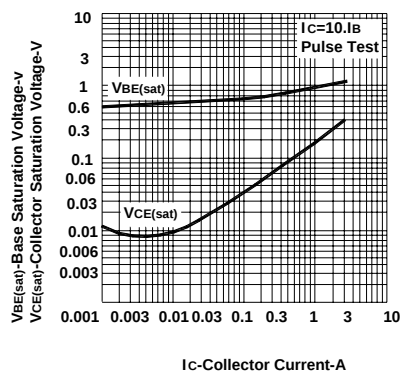
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



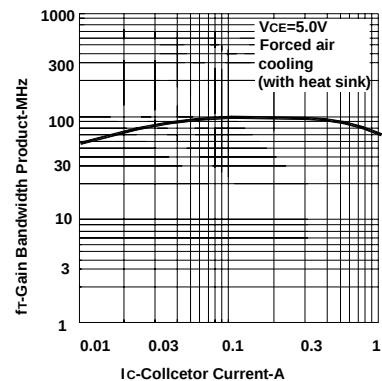
DC CURRENT GAIN, BASE TO EMITTER VOLTAGE vs. COLLECTOR CURRENT



BASE AND COLLECTOR SATURATION VOLTAGE vs. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT vs. COLLECTOR CURRENT



INPUT AND OUTPUT CAPACITANCE vs. REVERSE VOLTAGE

