

SOT-89 Plastic-Encapsulate Transistors

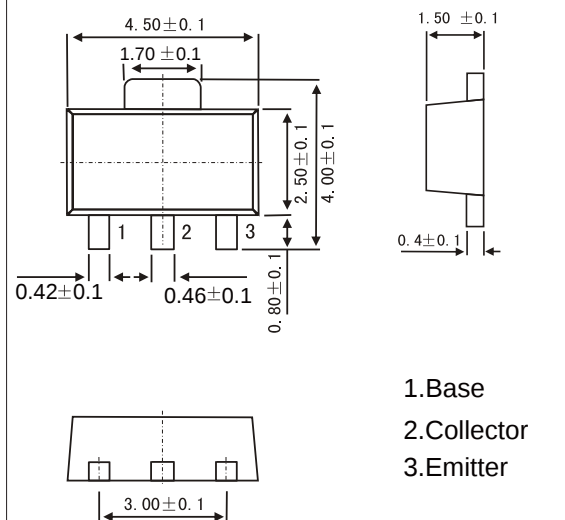
FEATURES

- PNP transistor High current output up to 3A
- Low Saturation Voltage
- PNP Transistors

MECHANICAL DATA

- Case style:SOT-89 molded plastic
- Mounting position:any

SOT-89



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-40	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-6	V
Collector Current to Continuous	I_C	-3	A
Collector Dissipation	P_C	0.5	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55 to 150	°C

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}	$I_C = -10\text{ mA}, I_B = 0$	-30			V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -100\text{ uA}, I_C = 0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB} = -40\text{ V}, I_E = 0$			-1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -6\text{ V}, I_C = 0$			-1	μA
DC current gain	h_{FE}	$V_{CE} = -2\text{ V}, I_C = -1\text{ A}$	60		400	
		$V_{CE} = -2\text{ V}, I_C = -100\text{ mA}$	32			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -2\text{ A}, I_B = -0.2\text{ A}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -2\text{ A}, I_B = -0.2\text{ A}$			-1.5	V
Transition frequency	f_T	$V_{CE} = -5\text{ V}, I_C = -0.1\text{ mA}, f = 10\text{ MHz}$	50			MHz

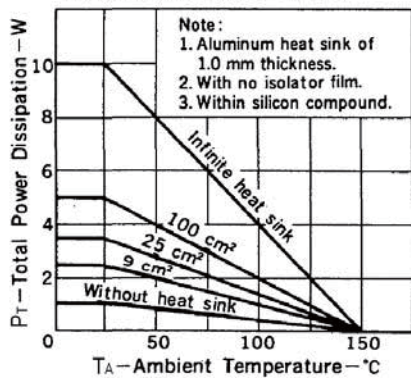
Classification of $h_{FE}(1)$

Marking	772*			
Range	R	Q	P	E
h_{FE}	60~120	100~200	160~320	200~400

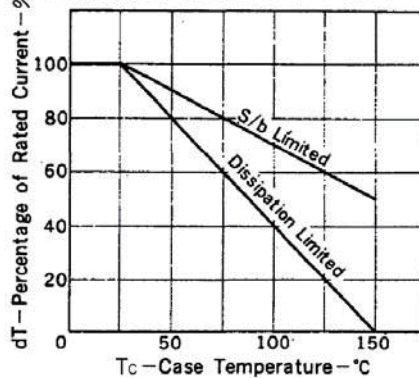


RATINGS AND CHARACTERISTIC CURVES

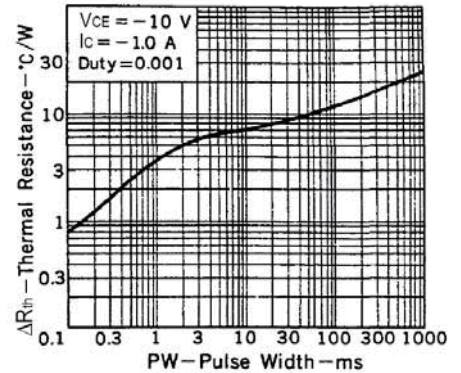
TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE



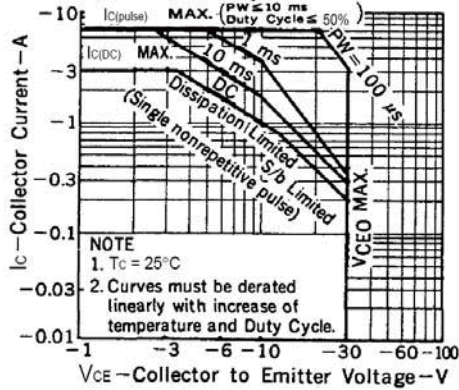
DERATING CURVES FOR ALL TYPES



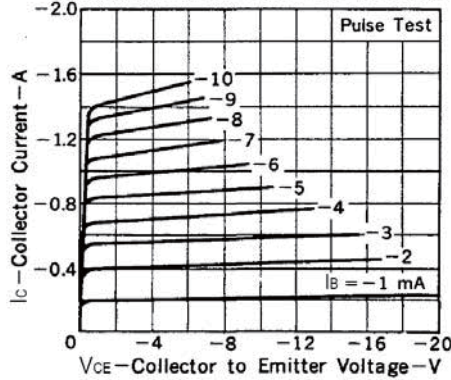
THERMAL RESISTANCE vs. PULSE WIDTH



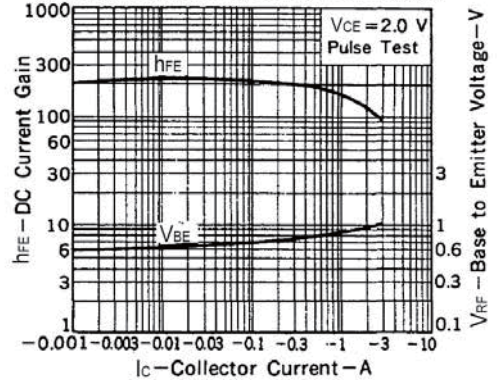
SAFE OPERATING AREAS



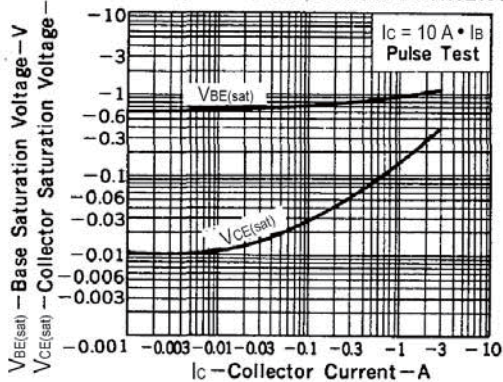
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



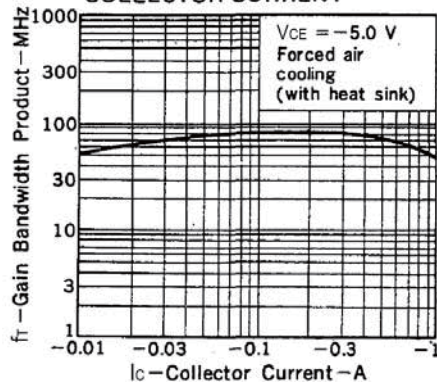
DC CURRENT GAIN, BASE TO EMITTER VOLTAGE vs. COLLECTOR CURRENT



BASE AND COLLECTOR SATURATION VOLTAGE vs. COLLECTOR CURRENT



GAIN BANDWIDTH PRODUCT vs. COLLECTOR CURRENT



INPUT AND OUTPUT CAPACITANCE vs. REVERSE VOLTAGE

