

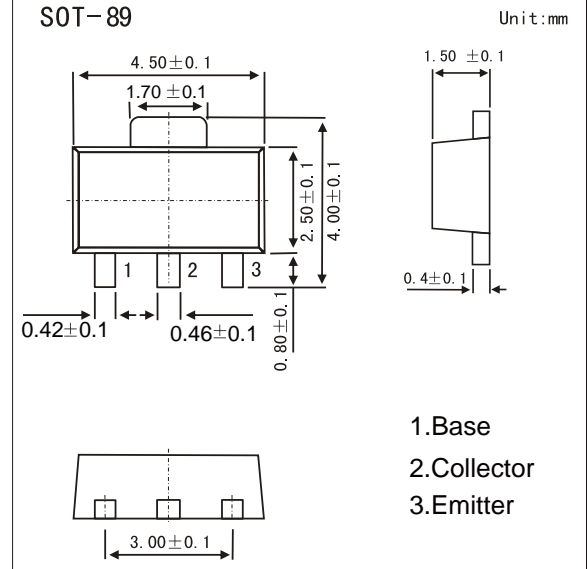
## SOT-89 Plastic-Encapsulate Transistors

### 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



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CB0}$	-40	V
Collector to Emitter Voltage	$V_{CE0}$	-30	V
Emitter to Base Voltage	$V_{EB0}$	-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	$V_{CB0}$	$I_C = -100\mu A, I_E = 0$	-40			V
Collector-emitter breakdown voltage	$V_{CE0}$	$I_C = -10\text{ mA}, I_B = 0$	-30			V
Emitter-base breakdown voltage	$V_{EB0}$	$I_E = -100\mu A, I_C = 0$	-6			V
Collector cut-off current	$I_{CB0}$	$V_{CB} = -40\text{ V}, I_E = 0$			-1	$\mu A$
Emitter cut-off current	$I_{EB0}$	$V_{EB} = -6\text{ V}, I_C = 0$			-1	$\mu A$
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

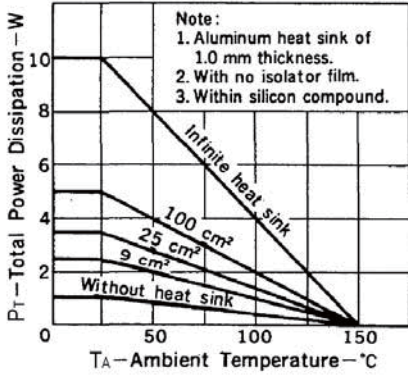
### Classification of $h_{FE}(1)$

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

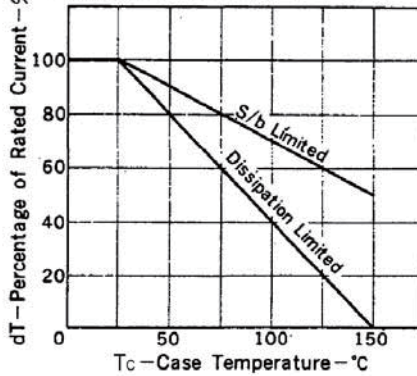


# RATINGS AND CHARACTERISTIC CURVES

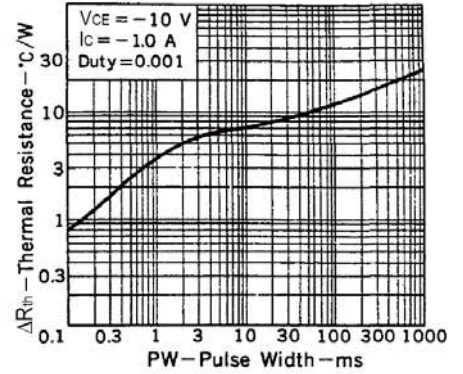
**TOTAL POWER DISSIPATION vs. AMBIENT TEMPERATURE**



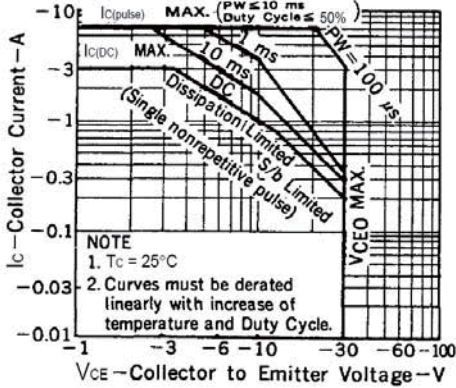
**DERATING CURVES FOR ALL TYPES**



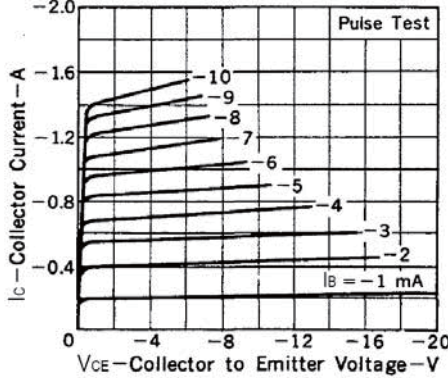
**THERMAL RESISTANCE vs. PULSE WIDTH**



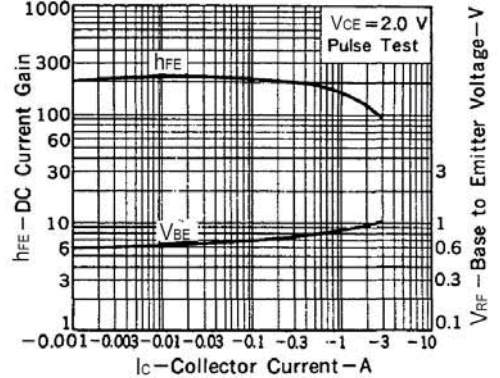
**SAFE OPERATING AREAS**



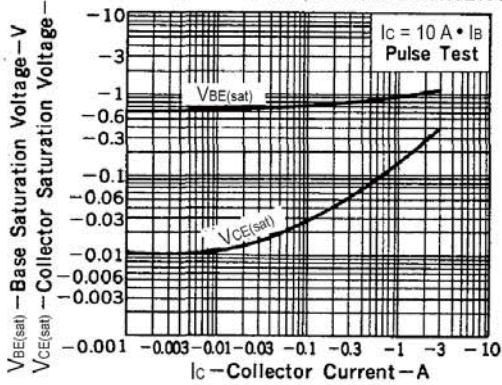
**COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE**



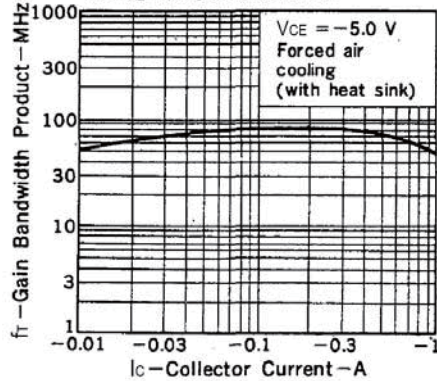
**DC CURRENT GAIN, BASE TO EMITTER VOLTAGE vs. COLLECTOR CURRENT**



**BASE AND COLLECTOR SATURATION VOLTAGE vs. COLLECTOR CURRENT**



**GAIN BANDWIDTH PRODUCT vs. COLLECTOR CURRENT**



**INPUT AND OUTPUT CAPACITANCE vs. REVERSE VOLTAGE**

