

SOT-89 Plastic-Encapsulate Transistors

SS8050

NPN Transistors

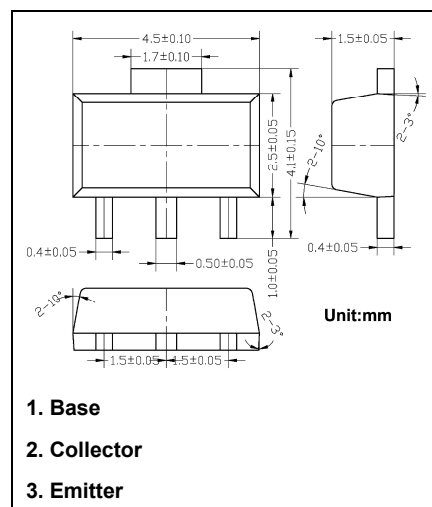
Features

■ Power Dissipation

P_{CM} : 1W ($T_A = 25^\circ\text{C}$)

: 2W ($T_C = 25^\circ\text{C}$)

Marking: Y1



Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector Base Voltage	40	V
V_{CEO}	Collector Emitter Voltage	25	V
V_{EBO}	Emitter Base Voltage	5	V
I_C	Collector Current	1.5	A
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55 ~ 150	$^\circ\text{C}$

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C = 100\mu\text{A}$, $I_E = 0$	40			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C = 0.1\text{mA}$, $I_B = 0$	25			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = 100\mu\text{A}$, $I_C = 0$	5			V
I_{CBO}	Collector cut-off current	$V_{CB} = 40\text{V}$, $I_E = 0$			100	nA
I_{CEO}	Collector cut-off current	$V_{CE} = 20\text{V}$, $I_B = 0$			100	nA
I_{EBO}	Emitter cut-off current	$V_{EB} = 5\text{V}$, $I_C = 0$			100	nA
$h_{FE(1)}$	DC current gain	$V_{CE} = 1\text{V}$, $I_C = 100\text{mA}$	200		350	
$h_{FE(2)}$		$V_{CE} = 1\text{V}$, $I_C = 800\text{mA}$	40			
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C = 800\text{mA}$, $I_B = 80\text{mA}$			0.5	V
$V_{BE(sat)}$	Base-emitter saturation voltage	$I_C = 800\text{mA}$, $I_B = 80\text{mA}$			1.2	V
V_{BE}	Base-emitter voltage	$V_{CE} = 1\text{V}$, $I_C = 10\text{mA}$			1	V
f_T	Transition frequency	$V_{CE}=10\text{V}$, $I_C=50\text{mA}$, $f=30\text{MHz}$	100			MHz

Typical Characteristics

