

SOT-89 Plastic-Encapsulate Transistors

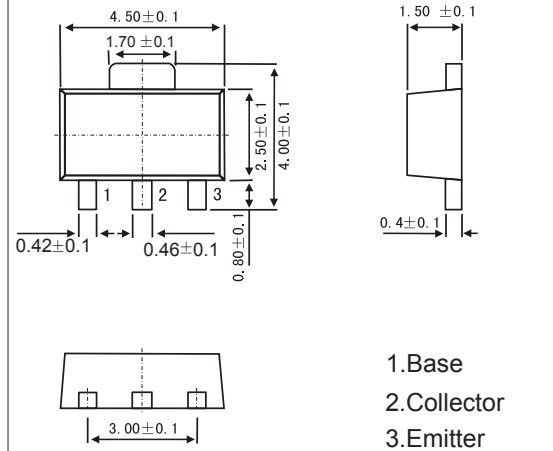
Features

- Small Flat Package
- High Current Application
- High Transition Frequency
- 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 - Base Voltage	V _{CB0}	-35	V
Collector - Emitter Voltage	V _{CEO}	-30	
Emitter - Base Voltage	V _{EB0}	-5	
Collector Current - Continuous	I _C	-800	mA
Collector Power Dissipation	P _C	500	mW
Thermal Resistance From Junction to Ambient	R _{θJA}	250	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-55 to 150	

PACKAGE INFORMATION

Device	Package	Shipping
2SA1664	SOT-89	1000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _C = -1mA, I _E =0	-35			V
Collector- emitter breakdown voltage	V _{CEO}	I _C = -10 mA, I _B =0	-30			
Emitter - base breakdown voltage	V _{EB0}	I _E = -1mA, I _C =0	-5			
Collector-base cut-off current	I _{CB0}	V _{CB} = -35 V, I _E =0			-0.1	uA
Emitter cut-off current	I _{EB0}	V _{EB} = -5V, I _C =0			-0.1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-500 mA, I _B =-20 mA			-0.7	V
Base - emitter saturation voltage	V _{BE(sat)}	I _C =-500 mA, I _B =-20 mA			-1.2	
Base - emitter voltage	V _{BE}	V _{CE} = -1V, I _C = -10mA	-0.5		-0.8	
DC current gain	h _{FE(1)}	V _{CE} = -1V, I _C = -100mA	100		320	
	h _{FE(2)}	V _{CE} = -1V, I _C = -700mA	35			
Collector output capacitance	C _{ob}	V _{CB} = -10V, I _E =0, f=1MHz		19		pF
Transition frequency	f _T	V _{CE} = -5V, I _C = -10mA		120		MHz

Classification of h_{FE(1)}

Type	2SA1664-O	2SA1664-Y
Range	100-200	160-320
Marking	RO	RY