

## SOT-89 Plastic-Encapsulate Transistors

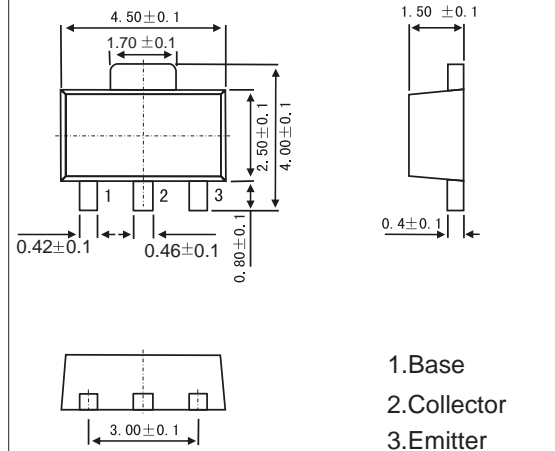
### Features

- High Voltage :  $V_{CE0}=-60V(\text{Min.})$ .
- High Current :  $I_C(\text{Max.})=-1A$ .
- High Transition Frequency
- Complementary to KTC4378.
- PNP Transistors

### MECHANICAL DATA

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

SOT-89



## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	$V_{CB0}$	-80	V
Collector - Emitter Voltage	$V_{CE0}$	-60	
Emitter - Base Voltage	$V_{EB0}$	-5	
Collector Current - Continuous	$I_C$	-1	A
Collector Current - Pulse	$I_{CP}$	-2	
Collector Power Dissipation	$P_C$	500	mW
		1	W
Junction Temperature	$T_J$	150	°C
Storage Temperature range	$T_{stg}$	-55 to 150	

### PACKAGE INFORMATION

Device	Package	Shipping
2SD1666	SOT-89	1000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	$V_{CB0}$	$I_C = -100 \mu A, I_E = 0$	-80			V
Collector- emitter breakdown voltage	$V_{CE0}$	$I_C = -1 \text{ mA}, I_B = 0$	-60			
Emitter - base breakdown voltage	$V_{EB0}$	$I_E = -100 \mu A, I_C = 0$	-5			
Collector-base cut-off current	$I_{CBO}$	$V_{CB} = -80V, I_E = 0$			-0.1	uA
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$			-0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$			-0.7	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = -500mA, I_B = -50mA$			-1.2	
DC current gain	$h_{FE}$	$V_{CE} = -2V, I_C = -50mA$	60		200	
		$V_{CE} = -2V, I_C = -1A$	30			
Collector output capacitance	$C_{ob}$	$V_{CB} = -10V, f = 1MHz$		12		pF
Transition frequency	$f_T$	$V_{CE} = -10V, I_C = -50mA$		150		MHz

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

Type	KTA1668-O	KTA1668-Y
Range	60-120	100-200
Marking	JO	JY

# RATINGS AND CHARACTERISTIC CURVES

## Typical Characteristics

