

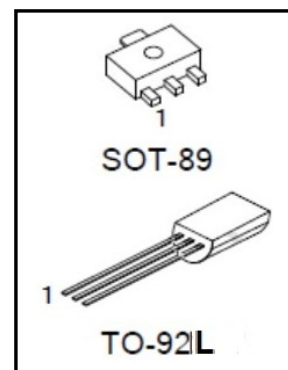
2SA1013

Features

- Complementary to: 2SC2383
- Package: TO-92L/SOT-89

Maximum Ratings (Ta = 25°)

Parameter	Symbol	Rating		Unit
Collector-base voltage	BV_{CBO}	-160		V
Collector-emitter voltage	BV_{CEO}	-160		V
Emitter-base voltage	BV_{EBO}	-6		V
Collector current	I_{CM}	1		A
Collector Power Dissipation	P_C	TO-92L	900	mW
		SOT-89	500	
Junction Temperature	T_j	125		°C
Storage Temperature	T_{stg}	-55~+125		°C



Package	Pin assignment		
	1	2	3
TO-92L	E	C	B
SOT-89	B	C	E

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = -100\mu A, I_E = 0$	-160			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = -10mA, I_B = 0$	-160			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -100\mu A, I_C = 0$	-6			V
Collector-base cut-off current	I_{CBO}	$V_{CB} = -150V, I_E = 0$			-1.0	μA
Collector-emitter cut-off current	I_{CEO}	$V_{CE} = -150V, I_B = 0$			-10	μA
Emitter-base cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-1.0	μA
DC current gain	H_{FE1}	$V_{CE} = -5V, I_C = -0.2A$	60		320	
	H_{FE2}	$V_{CE} = -5V, I_C = -10mA$	40			
Collector-emitter saturation voltage	V_{CESAT}	$I_C = -0.5A, I_B = -50mA$			-1.0	V
Base-Emitter Saturation Voltage	V_{BESAT}	$I_C = -0.5A, I_B = -50mA$			-1.2	
Transition frequency	f_T	$V_{CE} = -5V, I_C = -0.2A,$	20			MHz

Classification of H_{FE}

Rank	2SC2383-R	2SC2383-O	2SC2383-Y
Range	60-120	100-200	160-320