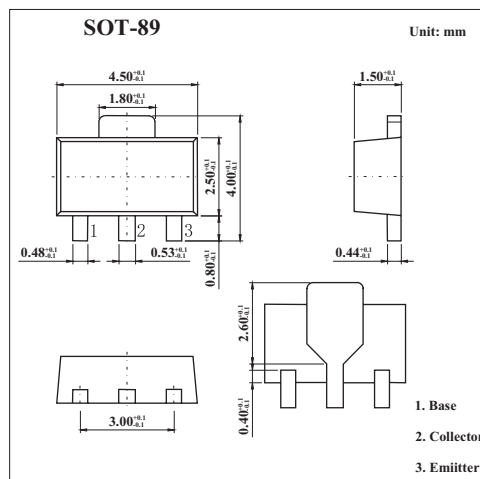


KCX491A

■ Features

- 60 Volt V_{CE0} .
- 1 Amp continuous current.
- P_{tot} = 1 Watt.



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	80	V
Collector-emitter voltage	V_{CEO}	60	V
Emitter-base voltage	V_{EBO}	5	V
Peak pulse current	I_C	1	A
Continuous collector current	I_{CM}	2	A
Power dissipation	P_D	1	W
Operating and storage temperature range	T_j, T_{stg}	-65 to +150	$^\circ C$

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Breakdown Voltages	$V_{(BR)CBO}$	$I_C=100\mu A$	80			V
Breakdown Voltages	$V_{CEO(sus)}$	$I_C=10mA$	60			V
Breakdown Voltages	$V_{(BR)EBO}$	$I_E=100\mu A$	5			V
Collector-base cut-off current	I_{CBO}	$V_{CB}=60V$			100	nA
	I_{CES}	$V_{CE}=60V$			100	nA
Emitter-base current	I_{EBO}	$V_{EB}=4V$			100	nA
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$ $I_C=1A, I_B=100mA$			0.25 0.5	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	$I_C=1A, I_B=100mA$			1.1	V
Base-emitter ON voltage *	$V_{BE(on)}$	$I_C=1A, V_{CE}=5V$			1.0	V
Static Forward Current Transfer Ratio *	h_{FE}	$I_C=1mA, V_{CE}=5V$	100			
		$I_C=500mA, V_{CE}=5V^*$	100		300	
		$I_C=1A, V_{CE}=5V^*$	80			
		$I_C=2A, V_{CE}=5V^*$	30			
Output capacitance	C_{obo}	$V_{CB}=10V, f=1MHz$			10	pF
Transitional frequency	f_T	$I_C=50mA, V_{CE}=10V, f=100MHz$	150			MHz

* Pulse test: $t_p = 300 \mu s; d \leq 0.02$.