



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92MOD Plastic-Encapsulate Transistors

2SA1160 TRANSISTOR (PNP)

FEATURE

Power dissipation

P_{CM} : 0.9 W ($T_{amb}=25^{\circ}C$)

Collector current

I_{CM} : -2A

Collector-base voltage

$V_{(BR)CBO}$: -20 V

Operating and storage junction temperature range

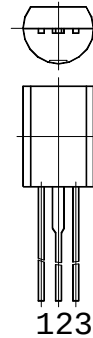
T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$

TO-92MOD

1. EMITTER

2. COLLECTOR

3. BASE



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ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -1mA, I_E = 0$	-20			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-10			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1mA, I_C = 0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB} = -20V, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -6V, I_C = 0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -1V, I_C = -0.5A$	140		600	
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = -4A$	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -2A, I_B = -50mA$		-0.2	-0.5	V
Transition frequency	f_T	$V_{CE} = -1V, I_C = -0.5A$		140		MHz
Output capacitance	C_{ob}	$V_{CE} = -10V, I_E = 0, f = 1MHz$		50		pF

CLASSIFICATION OF h_{FE}

Rank	A	B	C
Range	140-280	200-400	300-600