



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92MOD Plastic-Encapsulate Transistors

2SD789 TRANSISTOR (NPN)

FEATURE

Power dissipation

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

Collector current

I_{CM} : 1 A

Collector-base voltage

$V_{(BR)CBO}$: 100 V

Operating and storage junction temperature range

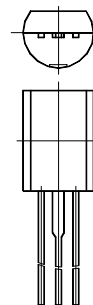
T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$

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	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	100		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, I_B = 0$	50		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	6		V
Collector cut-off current	I_{CBO}	$V_{CB} = 80V, I_E = 0$		1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 6V, I_C = 0$		0.2	μA
DC current gain	h_{FE}	$V_{CE} = 2V, I_C = 100mA$	100	800	
Collector-emitter saturation voltage	V_{CEsat}	$I_C = 1A, I_B = 100mA$		0.3	V
Transition frequency	f_T	$V_{CE} = 2V, I_C = 10mA$	80		MHz
Output capacitance	C_{ob}	$V_{CE} = 10V, I_E = 0, f = 1MHz$		30	pF

CLASSIFICATION OF h_{FE}

Rank	B	C	D	E
Range	100-200	160-320	250-500	400-800