SOT-89-3L Plastic-Encapsulate Transistors

CJF715 TRANSISTOR (NPN)

DESCRIPTION

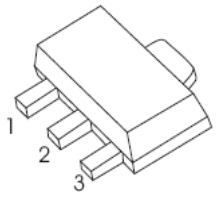
The CJF715 are NPN transistorsmanufactured using Planar Technology resultingin rugged high performance devices.

FEATURES

- VOLTAGE REGULATION
- RELAY DRIVER
- GENERIC SWITCH

Marking: 715

SOT-89-3L



1. BASE
2. COLLECTOR
3. EMITTER

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector -Base Voltage	140	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Continuous Collector Current	1.5	A
P_C	Collector Dissipation	0.5	W
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	250	℃/ W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=1mA,I_E=0	140			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$*	I_C=10mA,I_B=0	80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=1mA, I_C=0	5			V
Collector cut-off current(V_{BE}=0V)	I_{CES}	V_{CB}=140V,I_E=0			500	uA
Collector cut-off current	I_{CEO}	V_{CB}=80V,I_E=0			1	mA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			100	uA
DC current gain	h_{FE}*	V_{CE}=2V,I_C=0.1A	140			
		V_{CE}=2V,I_C=0.5A	80			
		V_{CE}=2V,I_C=1A	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$ *	I_C=100mA,I_B=10mA			0.25	V
		I_C=1A,I_B=100mA			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$ *	I_C=100mA,I_B=10mA			1	V
		I_C=1A,I_B=100mA			1.1	V
Transition frequency	f_T	V_{CE}=10V,I_C=100mA		50		MHz

* Pulse test: Pulse Width ≤300μs, Duty Cycle≤ 2.0%.