



SOT-89-3L Plastic-Encapsulate Transistors

CJF715 TRANSISTOR (NPN)

DESCRIPTION

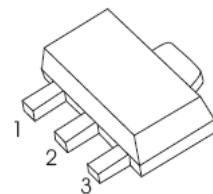
The CJF715 are NPN transistors manufactured using Planar Technology resulting in rugged high performance devices.

FEATURES

- VOLTAGE REGULATION
- RELAY DRIVER
- GENERIC SWITCH

Marking: 715

SOT-89-3L



1. BASE
2. COLLECTOR
3. EMITTER

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ 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	$^{\circ}\text{C}/\text{W}$
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS (T_a=25°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	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%.