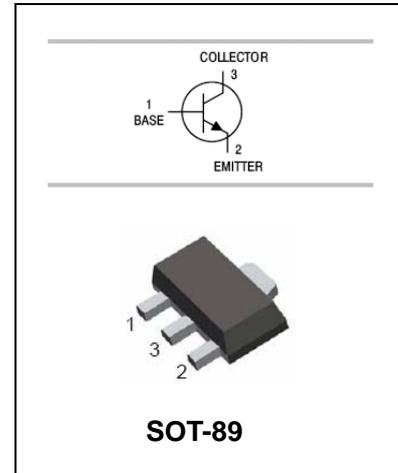


NPN Medium Power Transistor

STF715

FEATURES

- Voltage Regulation.
- Relay Driver.
- Generic Switch.



APPLICATIONS

- NPN Medium Power Transistors.

ORDERING INFORMATION

Type No.	Marking	Package Code
STF715	715	SOT-89

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
V _{CB0}	Collector-Base Voltage	140	V
V _{CEO}	Collector-Emitter Voltage	80	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current	1.5	A
I _{CM}	Collector Peak Current(t _p <5ms)	2	A
I _B	Base Current	0.3	A
I _{BM}	Base Peak Current(t _p <5ms)	0.6	A
P _C	Collector Dissipation	1.4	W
T _j , T _{stg}	Junction and Storage Temperature	-65 to +150	°C



NPN Medium Power Transistor

STF715

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

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

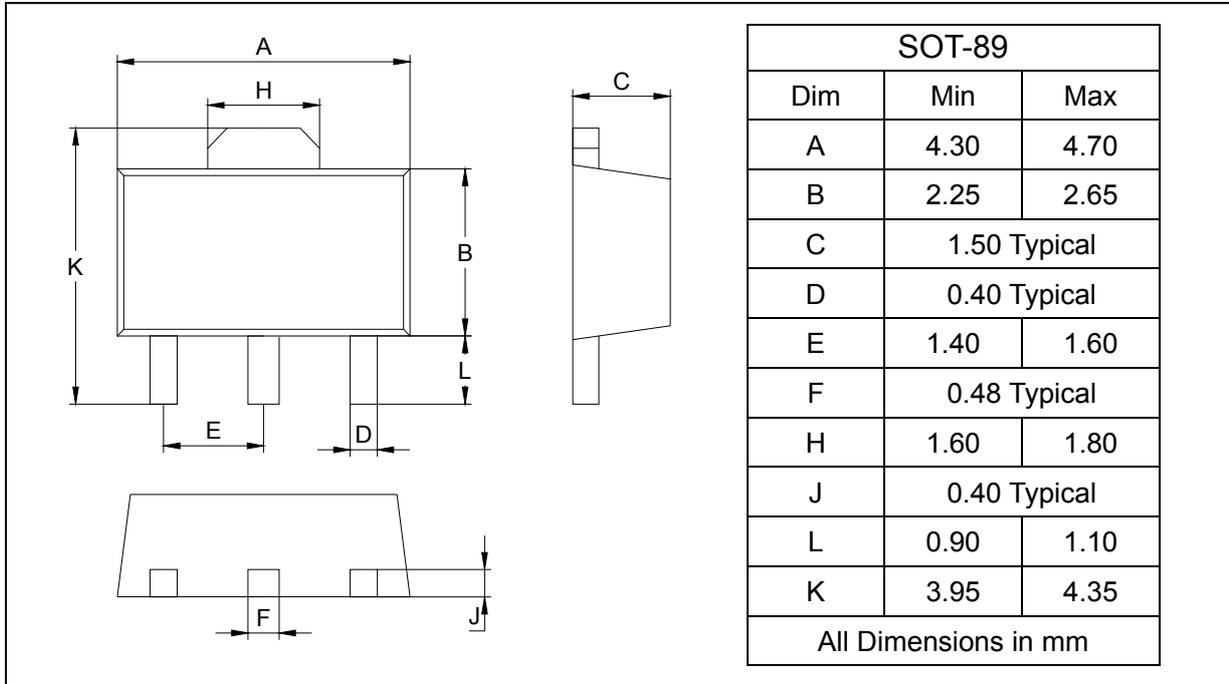
NPN Medium Power Transistor

STF715

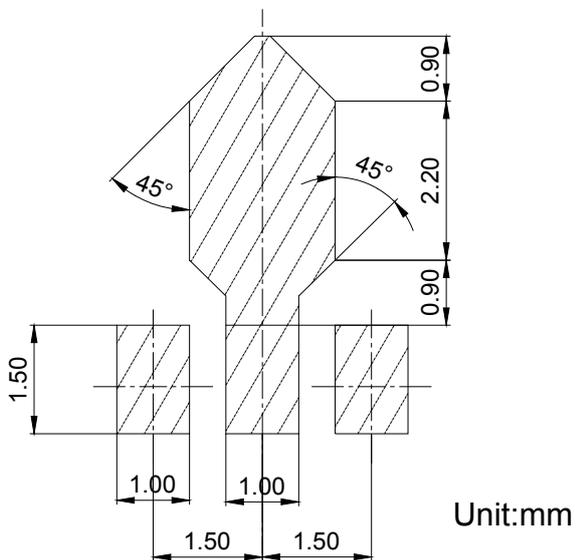
PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
STF715	SOT-89	1000/Tape&Reel