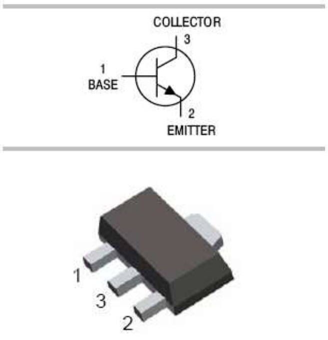
NPN Epitaxial Planar Silicon Transistor **2SC4272**

FEATURES

Lead-free

- Small size making it easy to provide high-density,small-sized hybrid IC′ s.



SOT-89

ORDERING INFORMATION

Type No.	Marking	Package Code
2SC4272	CH	SOT-89

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Units**
V_{CBO}	Collector-Base Voltage	75	V
V_{CEO}	Collector-Emitter Voltage	45	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	1.0	A
I_{CP}	Collector Current(Pulse)	1.5	A
P_C	Collector Dissipation	1.3	W
$T_{j,}T_{stg}$	Junction and Storage Temperature	-55 to +150	℃

NPN Epitaxial Planar Silicon Transistor **2SC4272**

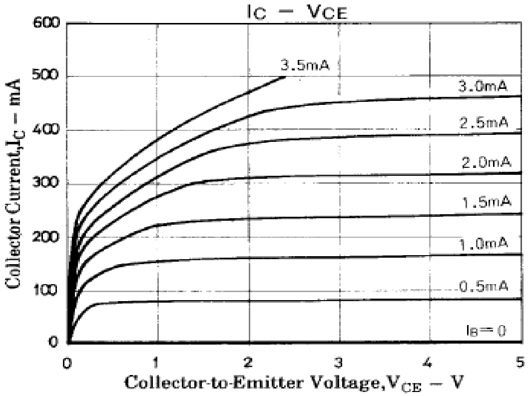
ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

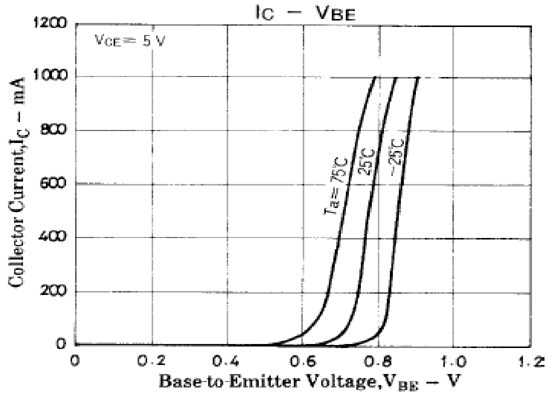
Parameter	**Symbol**	**Test conditions**	**MIN**	**TYP**	**MAX**	**UNIT**
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=10uA,I_E=0	75			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	45			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10uA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=40V,I_E=0			1.0	μA
Emitter cut-off current	I_{EBO}	V_{EB}=4V,I_C=0			1.0	μA
DC current gain	h_{FE}	V_{CE}=5V,I_C=500mA	60		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=0.5A, I_B=0.05A		0.2	0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=0.5A, I_B=0.05A		0.9	1.2	V
Transition frequency	f_T	V_{CE}=10V,I_c=50mA	180	250		MHz
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz		15		pF

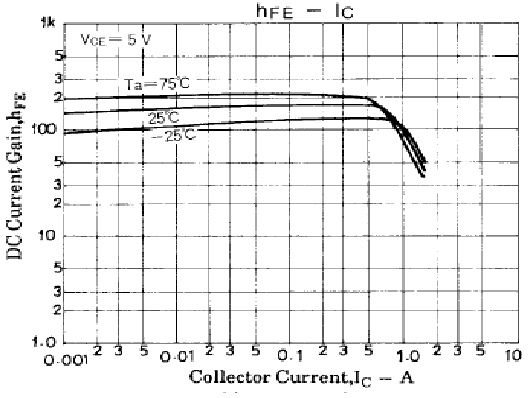
CLASSIFICATION OF h_{FE}

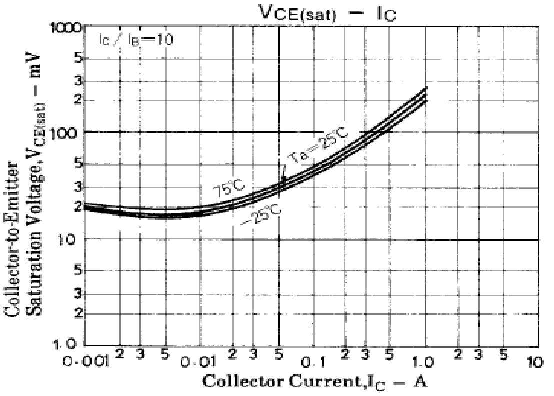
Rank	60-120	100-200	160-390
Range	D	E	F

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified



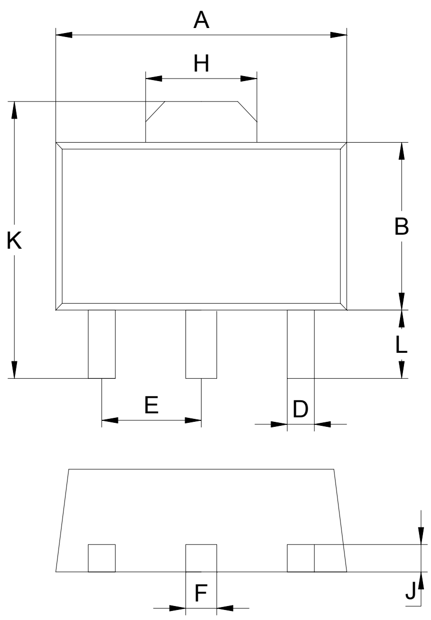






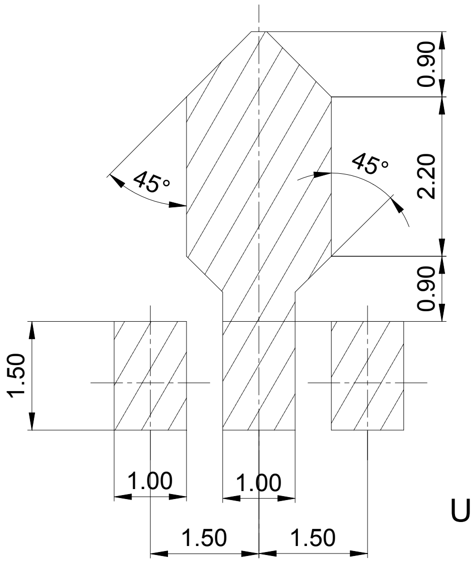
PACKAGE OUTLINE

Plastic surface mounted package SOT-89



SOT-89		
Dim	Min	Max
A	4.30	4.70
B	2.25	2.65
C	1.50 Typical	
D	0.40 Typical	
E	1.40	1.60
F	0.48 Typical	
H	1.60	1.80
J	0.40 Typical	
L	0.90	1.10
K	3.95	4.35
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit:mm

PACKAGE INFORMATION

Device	Package	Shipping
2SC4272	SOT-89	1000/Tape&Reel