



TRANSISTOR (NPN)

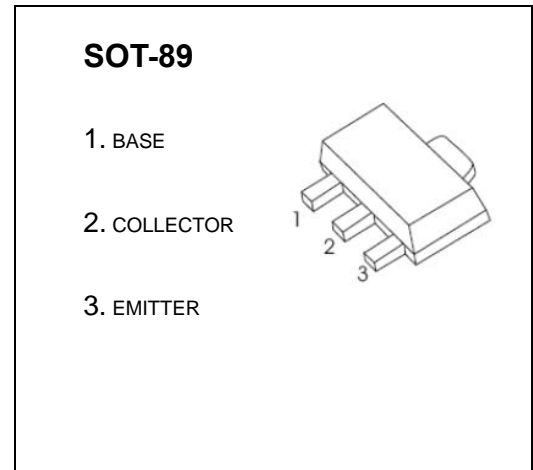
FEATURES

Power dissipation

Pb-Free package is available

RoHS product for packing code suffix "G"

Halogen free product for packing code suffix "H"



MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	40	V
V _{CEO}	Collector-Emitter Voltage	30	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current -Continuous	3	A
P _C	Collector Power Dissipation	0.5	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~150	°C

ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise specified)

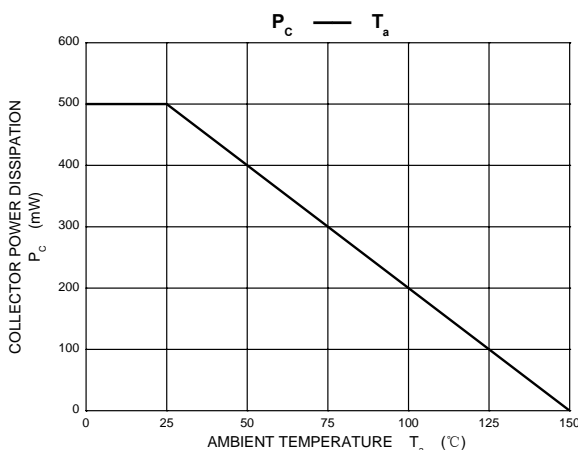
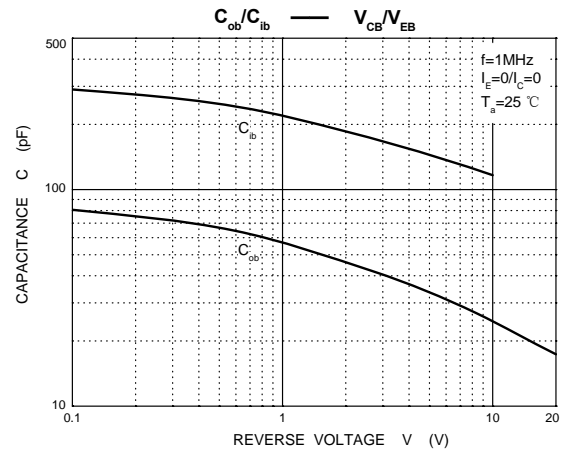
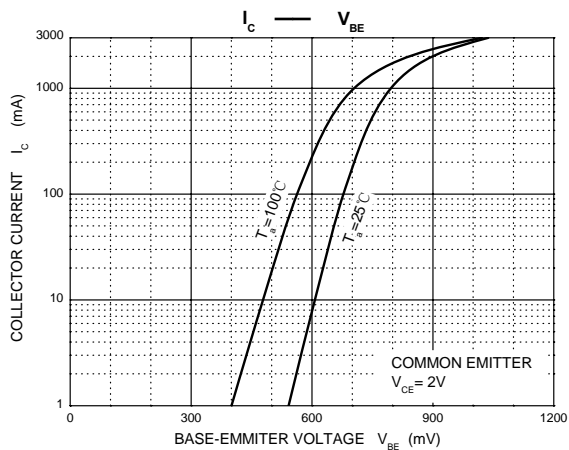
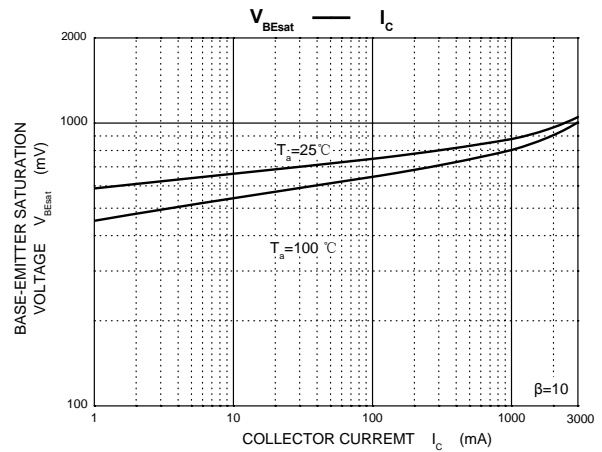
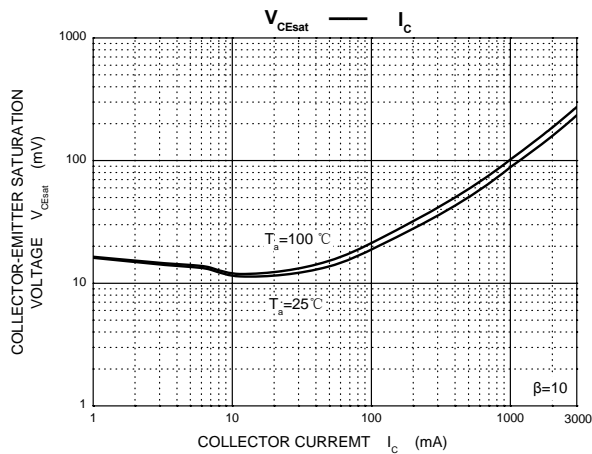
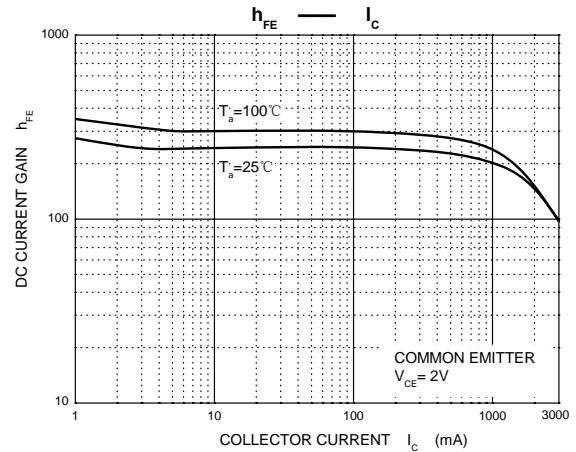
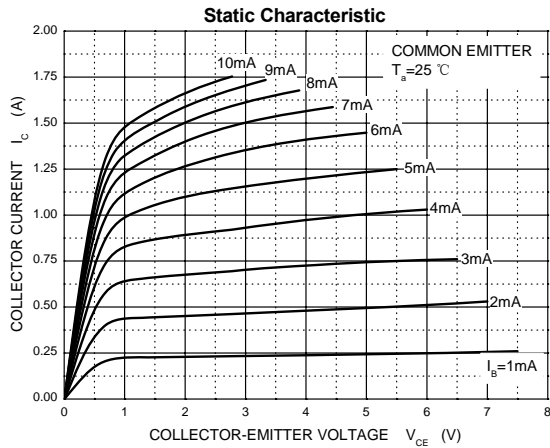
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 100μA, I _E =0	40			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = 10mA, I _B =0	30			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = 100μA, I _C =0	6			V
Collector cut-off current	I _{CBO}	V _{CB} = 40V, I _E =0			1	μA
Collector cut-off current	I _{CEO}	V _{CE} = 30V, I _B =0			10	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 6V, I _C =0			1	μA
DC current gain	h _{FE(1)}	V _{CE} =2V, I _C = 1A	60		400	
	h _{FE(2)}	V _{CE} =2V, I _C = 100mA	32			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = 2A, I _B = 0.2 A			0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = 2A, I _B = 0.2 A			1.5	V
Transition frequency	f _T	V _{CE} = 5V , I _C =0.1A f =10MHz	50			MHz

CLASSIFICATION OF h_{FE(1)}

Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400



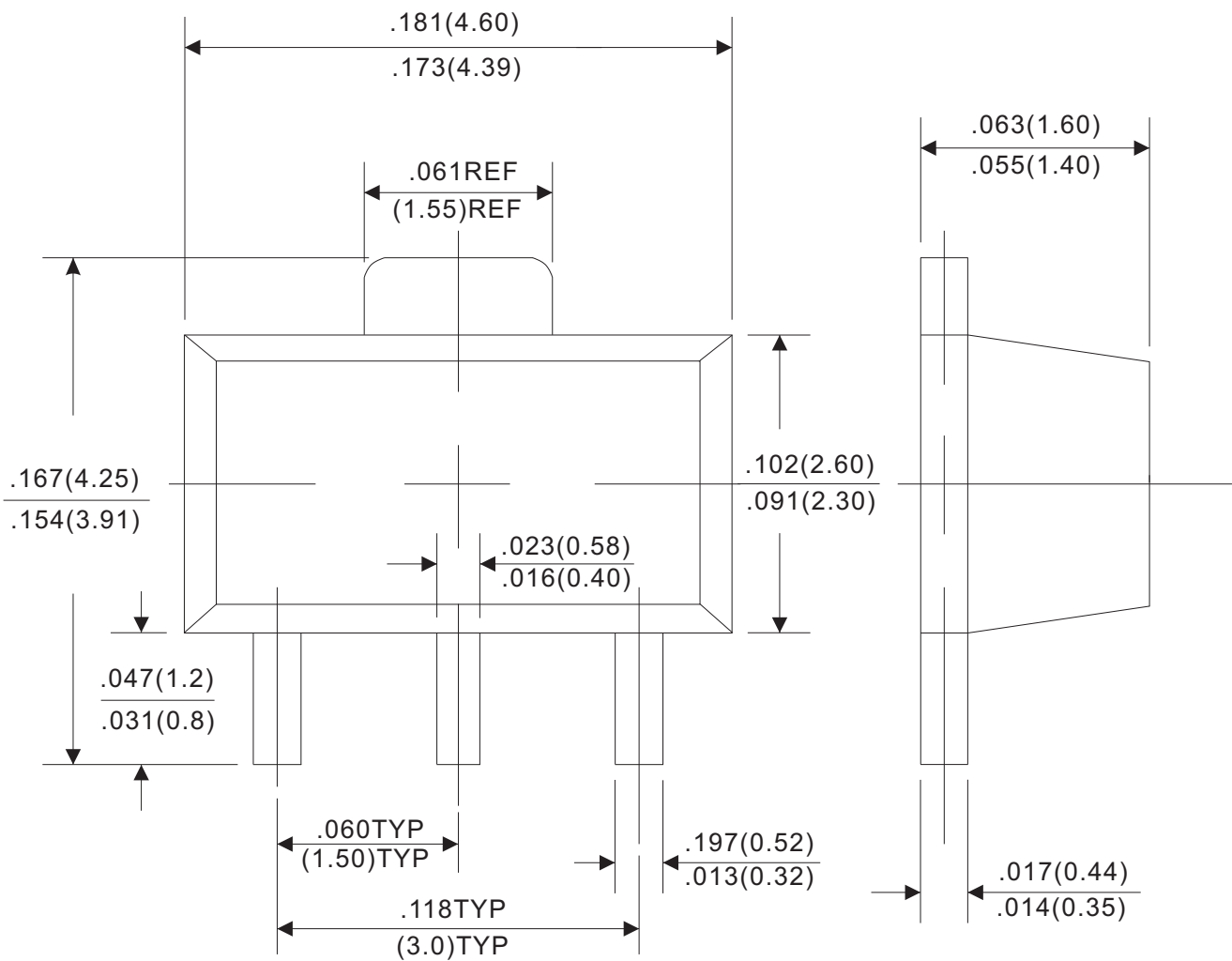
Typical Characteristics





Outline Drawing

SOT-89



Dimensions in inches and (millimeters)

Rev.C

Ordering Information:

Device PN	Packing
D882 x ⁽³⁾ -SOT89 ⁽¹⁾ G ⁽²⁾ -WS	Tape& Reel: 1 Kpcs/Reel

Note: (1) CASE:SOT-89

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

(3) CLASSIFICATION OF hFE RANK

Disclaimer

WILLAS reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. WILLAS or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on WILLAS data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. WILLAS does not assume any liability arising out of the application or use of any product or circuit.

WILLAS products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of WILLAS. Customers using or selling WILLAS components for use in such applications do so at their own risk and shall agree to fully indemnify WILLAS Inc and its subsidiaries harmless against all claims, damages and expenditures.