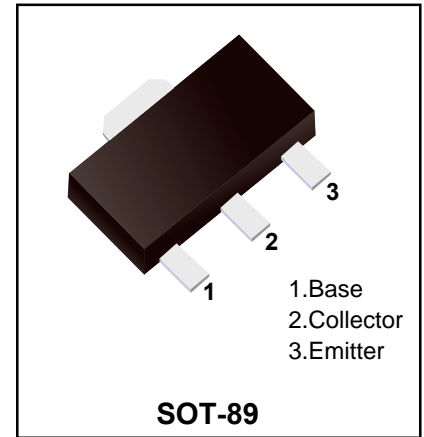


Plastic-Encapsulate Transistors
TRANSISTOR (NPN)

FEATURES

- ◆ Low saturation voltage
- ◆ High speed switching time
- ◆ Complementary to KTA1666



Absolute Maximum Rating (Ta=25°C)

Parameter	Symbols	Value	Units
Collector to Base Voltage	V_{CB0}	50	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	2.0	A
Collector Base – Continuous	I_B	0.4	A
Collector Power Dissipation	P_C	500	mW
Collector Power Dissipation*	$*P_C$	1.0	W
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-55~150	°C

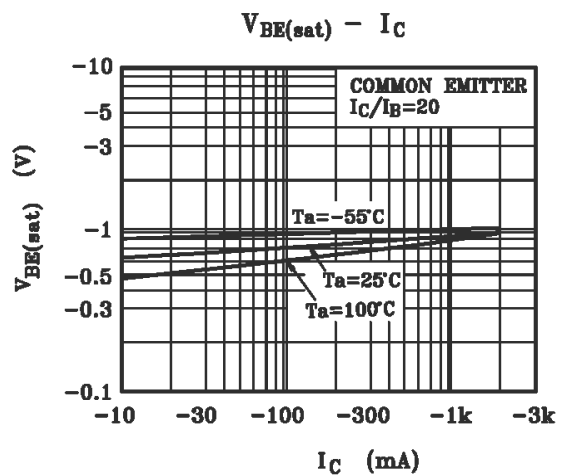
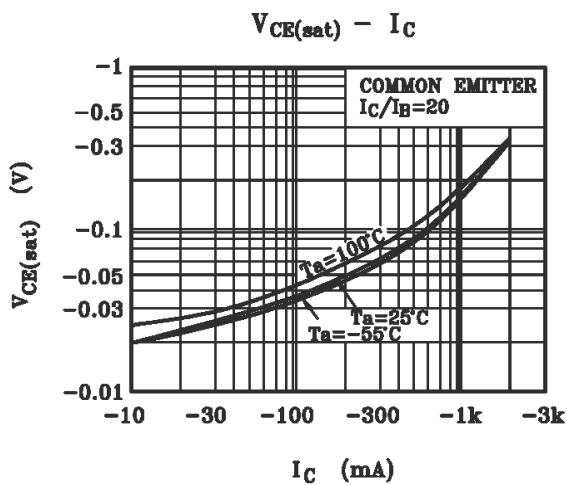
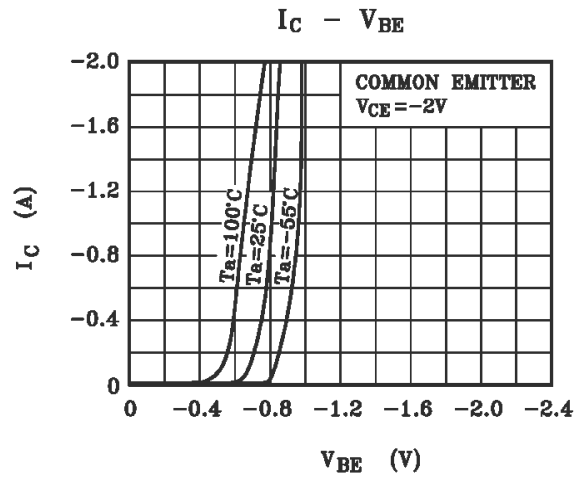
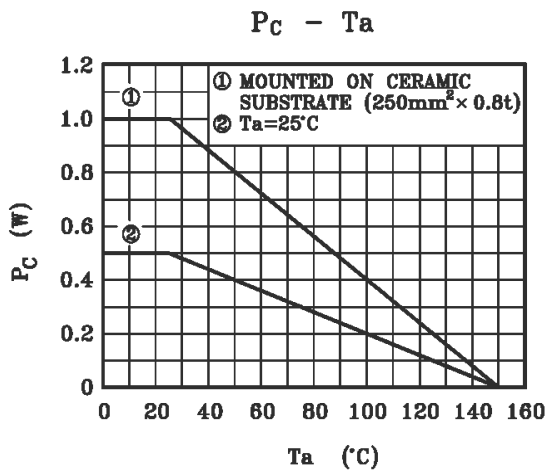
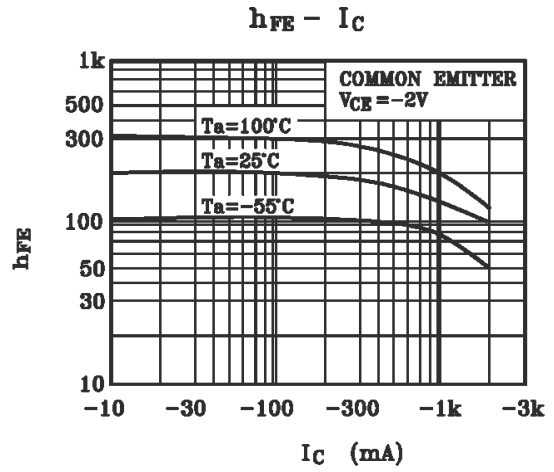
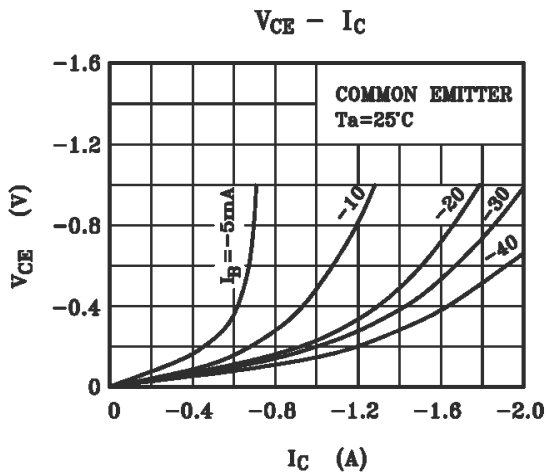
Electrical Characteristics(Ta=25°C)

Characteristics	Test Condition	Symbols	Min	Typ	Max	Units
Collector Cut-Off Current	$V_{CB}=50V \quad I_E=0$	I_{CBO}	-	-	0.1	μA
Emitter Base Cut-Off Current	$V_{EB}=5.0V \quad I_C=0$	I_{EBO}	-	-	0.1	μA
Collector to Emitter Breakdown Voltage	$I_C=10mA \quad I_B=0$	V_{CEO}	50	-	-	V
DC Current Gain	$V_{CE}=2.0V \quad I_C=0.5A$	$h_{FE(1)}$	70	-	240	
	$V_{CE}=2.0V \quad I_C=1.5A$	$h_{FE(2)}$	40	-	-	
Collector to Emitter Saturation Voltage	$I_C=1.0A \quad I_B=0.05A$	$V_{CE(sat)}$	-	-	0.5	V
Base to Emitter Saturation Voltage	$I_C=1.0A \quad I_B=0.05A$	$V_{BE(sat)}$	-	-	1.2	V
Transition Frequency	$V_{CE}=2.0V \quad I_C=0.5A$	f_T	-	120	-	MHz
Collector Output Capacitance	$V_{CB}=10V \quad I_E=0 \quad f=1MHz$	C_{ob}	-	30	-	pF
Turn-On Time	$I_{B1}=-I_{B2}=0.05A$	t_{on}	-	0.1	-	μS
Storage Time		t_{stg}	-	1.0	-	μS
Fall Time		t_f	-	0.1	-	μS

h_{FE} Classification

Classification	2SC2873-O	2SC2873-Y
Range	70~140	120~240
Marking	HMO	HMY

Electrical Characteristic Curve



Ordering information

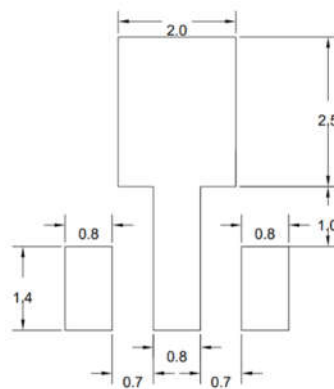
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel,7"reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

Package Dimensions

SOT-89

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

The recommended mounting pad size



UNIT:MM

Disclaimer

The information presented in this document is for reference only. Guangdong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.