

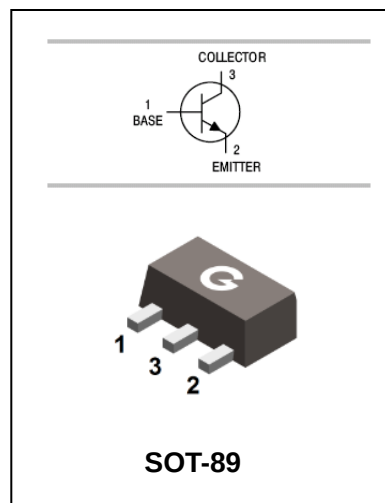
Silicon NPN Epitaxial Transistor

T2SC2873

FEATURES

- Small flat package.
- Low saturation voltage $V_{CE(sat)}=0.5V$
- High speed switching time
- Complementary to T2SA1213
- Halogen free
- RoHS compliant with Halogen-free
- Qualified to AEC-Q101 Standards

HF



APPLICATIONS

- Power amplifier
- Power Switching

ORDERING INFORMATION

Type No.	Marking	Package Code
T2SC2873-O	MO	SOT-89
T2SC2873-Y	MY	SOT-89

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	2	A
I_B	Base Current	0.4	A
P_C	Collector Power Dissipation	500	mW
P_C	Collector Power Dissipation(Note 1)	1000	mW
T_J, T_{STG}	Junction and Storage Temperature	-55 to +150	°C

Note 1: Mounted on a ceramic substrate (250mm²*0.8t)

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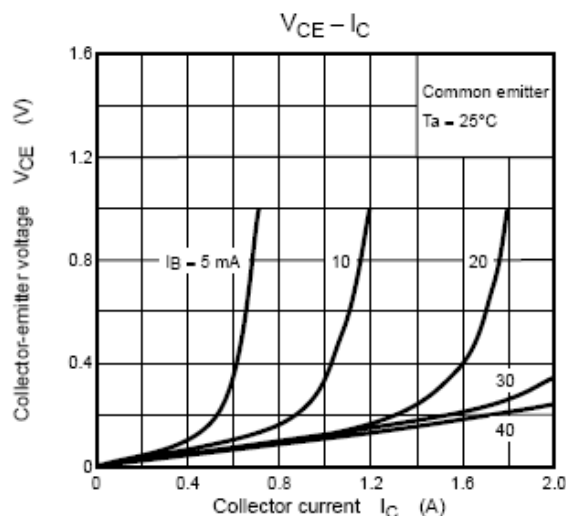
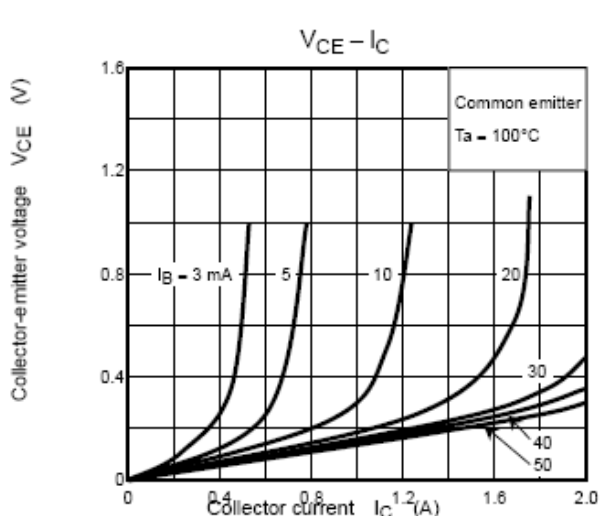
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	50			V
Collector cut-off current	I_{CBO}	$V_{CB}=50V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=2V, I_C=500mA$	70		240	
		$V_{CE}=2V, I_C=2A$	20			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=1A, I_B=50mA$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=1A, I_B=50mA$			1.2	V
Transition frequency	f_T	$V_{CE}=2V, I_C=0.5A$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		30		pF

CLASSIFICATION OF h_{FE}

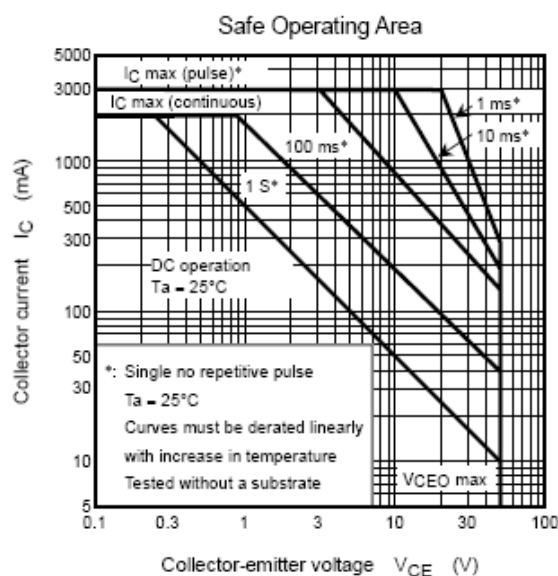
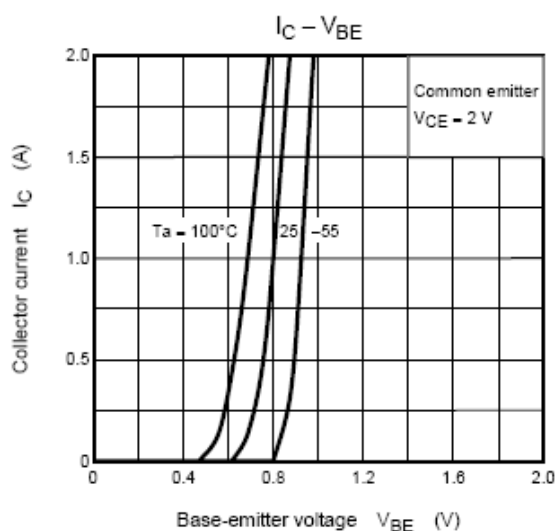
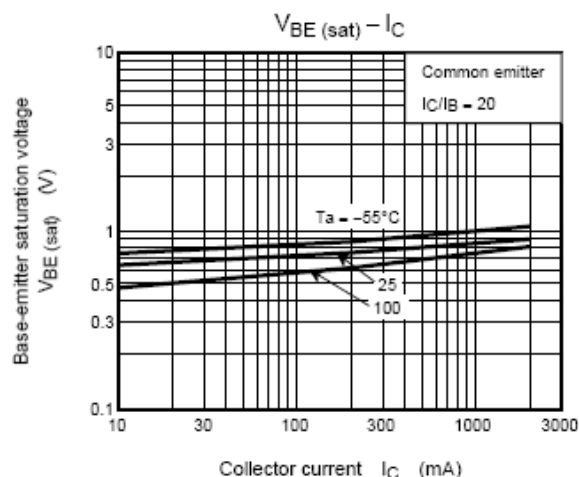
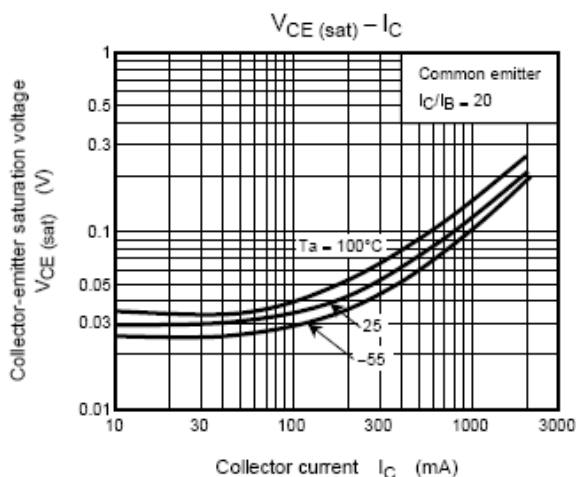
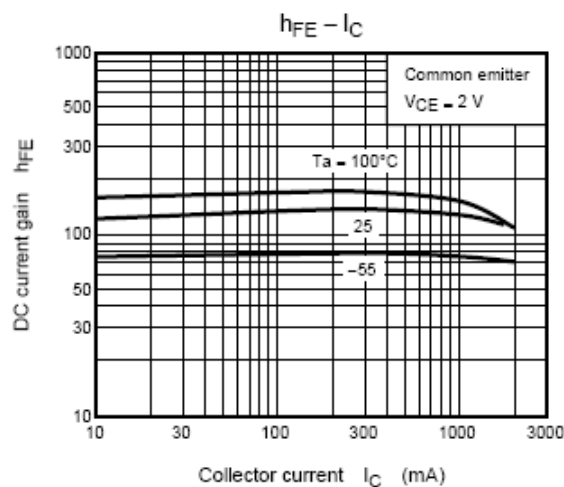
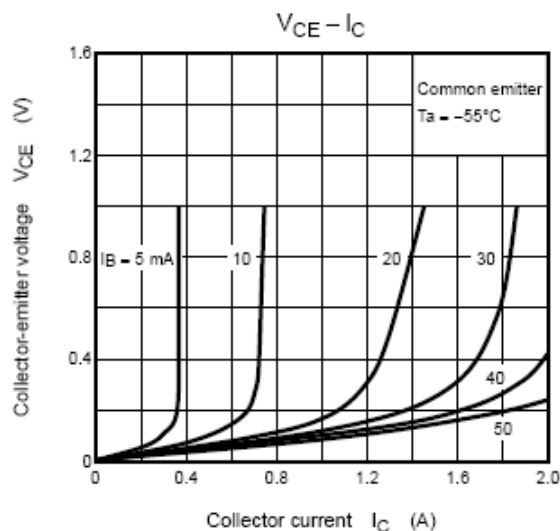
Rank	O	Y
Range	70-140	120-240
MARKING	MO	MY

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



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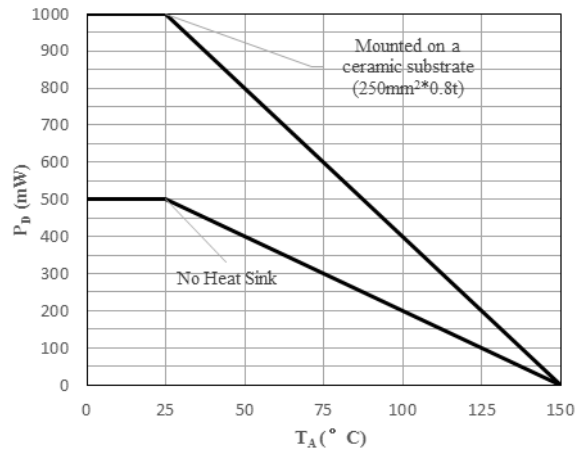
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$P_D - T_A$



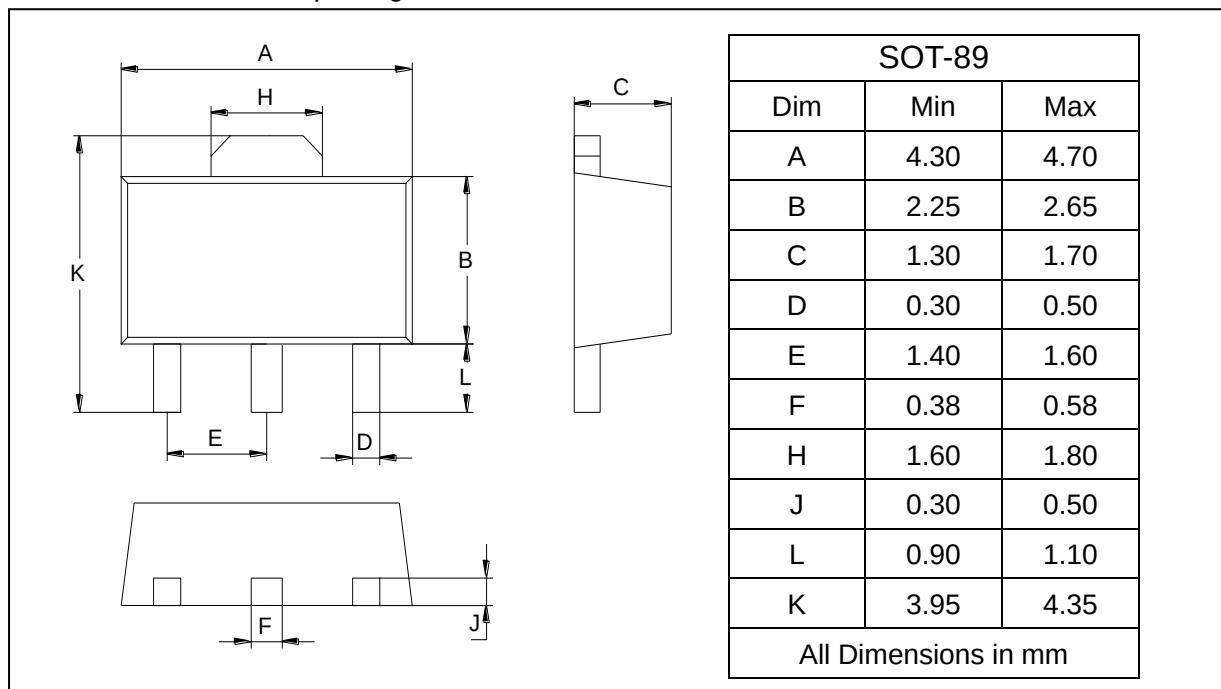
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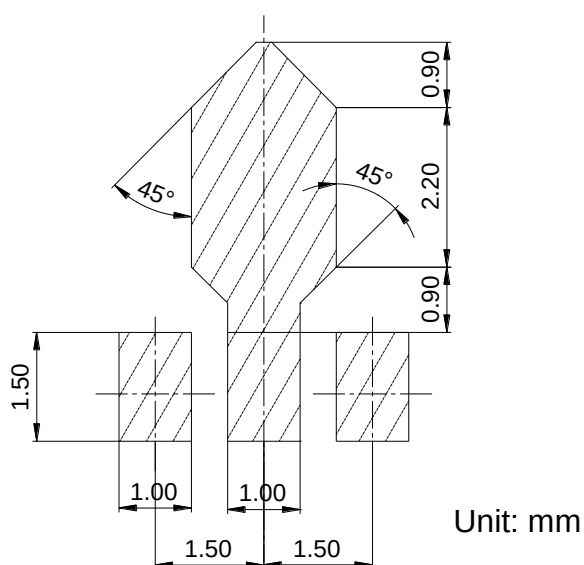
PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
T2SC2873	SOT-89	1000 pcs / Tape & Reel