

2SC2873 TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 0.5 W ($T_{amb}=25^{\circ}C$)

Collector current

I_{CM} : 2 A

Collector-base voltage

$V_{(BR)CBO}$: 50 V

Operating and storage junction temperature range

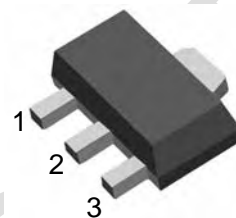
T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$

SOT-89

1. BASE

2. COLLECTOR

3. EMITTER



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	5			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	$h_{FE(1)}$	$V_{CE}=2V, I_C=0.5A$	70		240	
	$h_{FE(2)}$	$V_{CE}=2V, I_C=2A$	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	$V_{CE}=2V, I_C=500mA$		120		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		30		pF
Turn-off time	t_{on}	$V_{CC}=30V, I_C=1A$ $I_{B1}=-I_{B2}=0.05A$		0.1		μS
Fall time	t_f			1.0		
Storage time	t_s			0.1		

CLASSIFICATION OF $h_{FE(1)}$

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

