

### 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

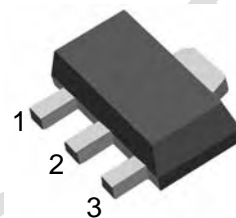
$T_J, T_{stg}$ :  $-55^{\circ}C$  to  $+150^{\circ}C$

#### 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	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
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		$\mu S$
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

