

NPN TRANSISTOR

(Pb) Lead(Pb)-Free

FEATURES:

Power dissipation

P_{CM} : 0.15 W ($T_{amb}=25^{\circ}C$)

Collector current

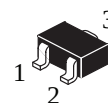
I_{CM} : 0.05 A

Collector-base voltage

$V_{(BR)CBO}$: 40 V

Operating and storage junction temperature range

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



SOT-523(SC-75)

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

Parameter	Symbol	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage $I_C=50\mu A, I_E=0$	$V_{(BR)CBO}$	40			V
Collector-emitter breakdown voltage $I_C=1mA, I_B=0$	$V_{(BR)CEO}$	25			V
Emitter-base breakdown voltage $I_E=50\mu A, I_C=0$	$V_{(BR)EBO}$	5			V
Collector cut-off current $V_{CB}=24V, I_E=0$	I_{CBO}			0.5	μA
Emitter cut-off current $V_{EB}=3V, I_C=0$	I_{EBO}			0.5	μA
DC current gain $V_{CE}=6V, I_C=1mA$	h_{FE}	56		270	
Collector-emitter saturation voltage $I_C=10mA, I_B=1mA$	$V_{CE(sat)}$			0.3	V
Transition frequency $V_{CE}=6V, I_C=1mA, f=100MHz$	f_T	150			MHz
Collector output capacitance $V_{CB}=6V, I_E=0, f=1MHz$	C_{ob}			2.2	pF

CLASSIFICATION OF h_{FE}

Rank	N	P	Q
Range	56-120	82-180	120-270
Marking	AN	AP	AQ