

GAE

GREAT AMERICAN ELECTROINCS

2N5583

Silicon Epitaxial-Planar Bipolar MW NPN transistor

Package Type: TO-39

ABSOLUTE MAXIMUM RATINGS ($T_{CASE} = 25^{\circ}C$)

SYMBOL	Rating	VALUE	UNIT
V_{CER}	Collector-Emitter Voltage $R_{EB}=10\Omega$	30	Vdc
V_{CBO}	Collector-Base Voltage	30	Vdc
V_{EBO}	Emitter-Base Voltage	5	Vdc
I_C	Collector Current-Continuous $T_a=-60...+70^{\circ}C$ $T_a=+125^{\circ}C$	0.5 0.3	Adc
I_{CM}	Pulse Collector Current $Q < 10$ and $t < 10\mu C$	1.0	A
P_{tot}	Total Device Dissipation $T_a=-60...+25^{\circ}C$ $T_a=+125^{\circ}C$	4 0.8	W
T_j	Junction Temperature	180	$^{\circ}C$
T_{stg}	Storage Temperature Range	-60...+125	$^{\circ}C$

Electrical Characteristics ($T_{CASE}=25^{\circ}C$)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{CBO}	Collector Cutoff Current $V_{CB}=30Vdc$		0.3	mA
I_{EBO}	Emitter Cutoff Current $V_{EB}=3Vdc$		0.1	mA
h_{FE}	DC Current Gain $V_{CB}=5Vdc, I_E=100mA$	20		
V_{CE}	Collector-Emitter Saturation Voltage $I_C=100mA, I_B=10mA$		0.6	V
h_{fe}	Current Gain Bandwidth Product $V_{CE}=10V, I_E=100mA, f=300MHz$	5		
V_{BE}	Base-Emitter Saturation Voltage $I_C=150mA, I_B=15mA$		1.1	Vdc