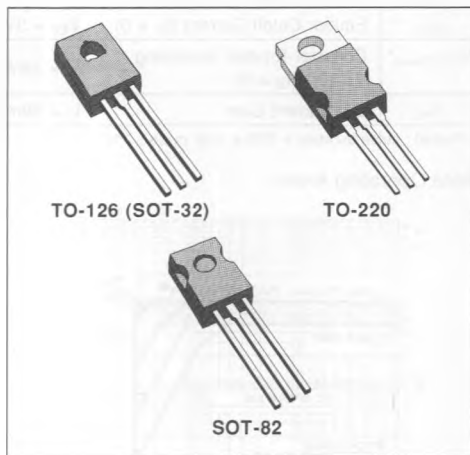


HIGH VOLTAGE POWER TRANSISTORS

DESCRIPTION

The MJE340, MJE340T, SGS340 are silicon epitaxial planar NPN transistors intended for use in medium power linear and switching applications. They are respectively mounted in TO-125, TO-220 and SOT-82 package.

The complementary PNP types are respectively the MJE350, MJE350T, SGS350.



INTERNAL SCHEMATIC DIAGRAMS



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_{CE0}	Collector-emitter Voltage ($I_B = 0$)	300	V
V_{EB0}	Emitter-base Voltage ($I_C = 0$)	3	V
I_C	Collector Current	0.5	A
P_{tot}	Total Power Dissipation at $T_{case} \leq 25^\circ\text{C}$	20.8	W
T_{stg}	Storage Temperature	- 65 to 150	$^\circ\text{C}$
T_j	Junction Temperature	150	$^\circ\text{C}$

THERMAL DATA

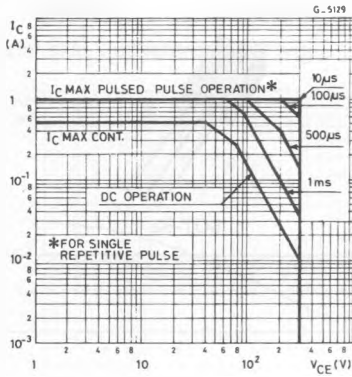
$R_{th(j-case)}$	Thermal Resistance Junction-case	Max	6.0	$^{\circ}C/W$
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ELECTRICAL CHARACTERISTICS ($T_{case} = 25^{\circ}C$ unless otherwise specified)

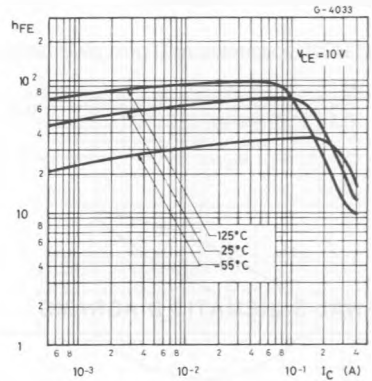
Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cutoff Current ($I_E = 0$)	$V_{CB} = 300V$			100	μA
I_{EBO}	Emitter Cutoff Current ($I_C = 0$)	$V_{EB} = 3V$			100	μA
$V_{CE(sus)}^{\circ}$	Collector-Emitter Sustaining Voltage ($I_B = 0$)	$I_C = 1mA$	300			V
h_{FE}	DC Current Gain	$I_C = 50mA$ $V_{CE} = 10V$	30		240	

* Pulsed : pulse duration = 300 μs , duty cycle $\leq 2\%$.

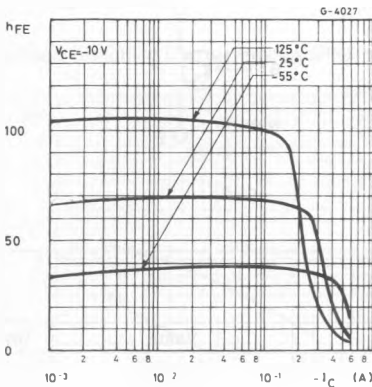
Safe Operating Areas.



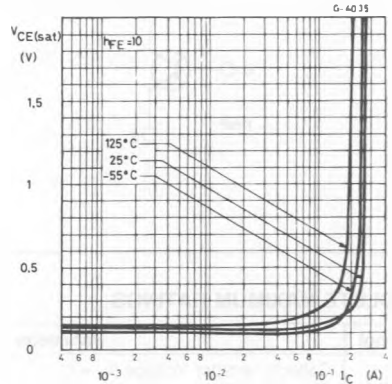
DC Current Gain (NPN).



DC Current Gain (PNP).



Collector-emitter Saturation Voltage (NPN).



Collector-emitter Saturation Voltage (PNP).

