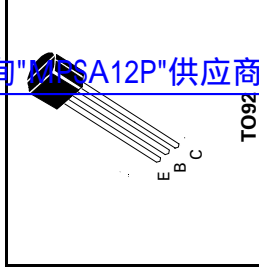


**NPN SILICON PLANAR MEDIUM
POWER DARLINGTON TRANSISTOR**

ISSUE 2 – NOV 93

MPSA12P



ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Emitter Voltage	V_{CES}	20	V
Emitter-Base Voltage	V_{EBO}	10	V
Continuous Collector Current	I_C	500	mA
Power Dissipation at $T_{amb}=25^{\circ}C$	P_{tot}	625	mW
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}C$).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Collector-Emitter Breakdown Voltage	$V_{(BR)CES}$	20			V	$I_C=100\mu A, I_B=0^*$
Collector Cut-Off Current	I_{CES}			100	nA	$V_{CE}=15V, V_{BE}=0$
Collector Cut-Off Current	I_{CBO}			100	nA	$V_{CB}=15V, I_E=0$
Emitter Cut-Off Current	I_{EBO}			100	nA	$V_{EB}=10V, I_C=0$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			1	V	$I_C=10mA, I_B=0.01mA$
Base-Emitter Saturation Voltage	$V_{BE(on)}$			1.4	V	$I_C=10mA, V_{CE}=5V^*$
Static Forward Current Transfer Ratio	h_{FE}	20K				$I_C=10mA, V_{CE}=5V^*$

*Measured under pulsed conditions. Pulse width =300 μs . Duty cycle $\leq 2\%$