

GENERAL PURPOSE APPLICATION.
DARLINGTON TRANSISTOR.

FEATURES

- Complementary to MPSA13/14.

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	MPSA62	V_{CBO}	-20	V
	MPSA63/64		-30	
Collector-Emitter Voltage	MPSA62	V_{CES}	-20	V
	MPSA63/64		-30	
Emitter-Base Voltage		V_{EBO}	-10	V
Collector Current		I_C	-500	mA
Collector Power Dissipation		P_C	625	mW
Junction Temperature		T_j	150	°C
Storage Temperature Range		T_{stg}	-55 ~ 150	°C



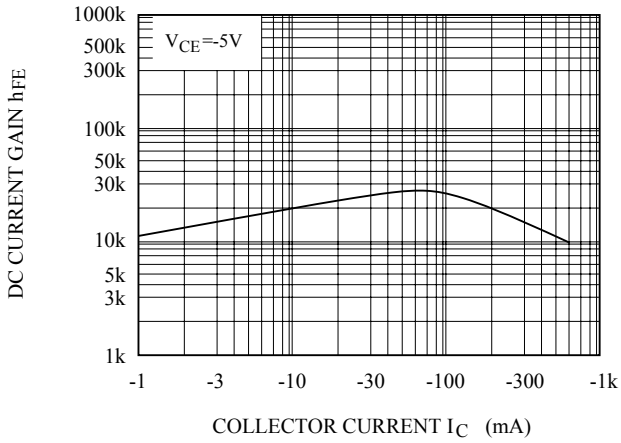
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage	MPSA62	$V_{(BR)CES}$	$I_C=-0.1mA, I_B=0$	-20	-	-	V
	MPSA63/64			-30	-	-	
Collector Cut-off Current	MPSA62	I_{CBO}	$V_{CB}=-15V, I_E=0$	-	-	-0.1	μA
	MPSA63/64		$V_{CB}=-30V, I_E=0$	-	-	-	
Emitter Cut-off Current		I_{EBO}	$V_{EB}=-10V, I_C=0$	-	-	-0.1	μA
DC Current Gain	MPSA62	h_{FE}	$I_C=-10mA, V_{CE}=-5V$	20,000	-	-	V
	MPSA63			5,000	-	-	
	MPSA64			10,000	-	-	
	MPSA63		$I_C=-100mA, V_{CE}=-5V$	10,000	-	-	
	MPSA64			20,000	-	-	
Collector-Emitter Saturation Voltage	MPSA62	$V_{CE(sat)}$	$I_C=-10mA, I_B=-0.01mA$	-	-	-1.0	V
	MPSA63/64		$I_C=-100mA, I_B=-0.1mA$	-	-	-1.5	
Base Emitter Voltage	MPSA62	V_{BE}	$I_C=-10mA, V_{CE}=-5V$	-	-	-1.4	V
	MPSA63/64		$I_C=-100mA, V_{CE}=-5V$	-	-	-2.0	
Current Gain Bandwith Product		MPSA63/64	$I_C=-10mA, f=100MHz, V_{CE}=-5V$	125	-	-	MHz

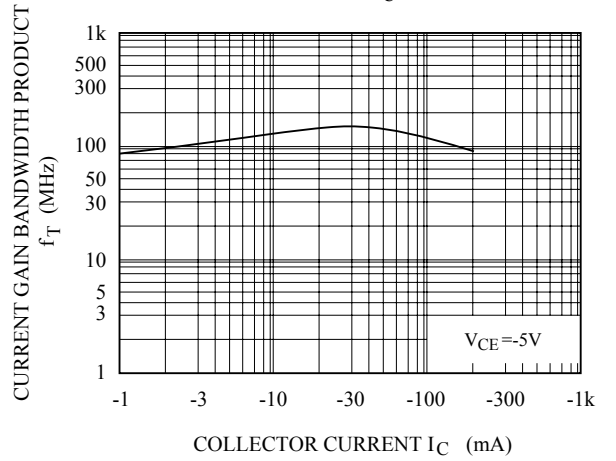
*Pulse Test : Pulse Width $\leq 300\mu s$, Duty Cycle $\leq 2\%$

MPSA62/63/64

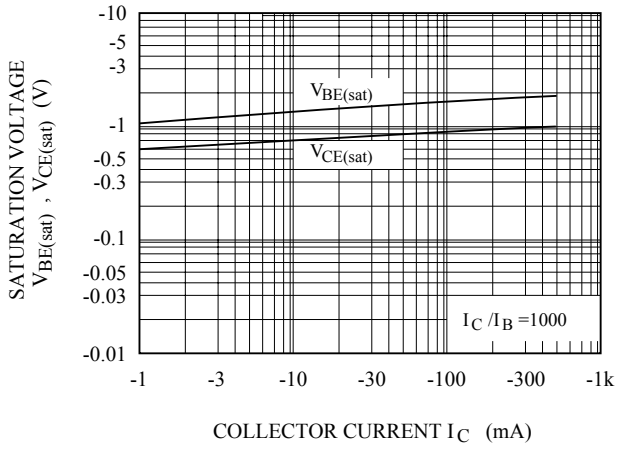
$h_{FE} - I_C$



$f_T - I_C$



$V_{BE(sat)}, V_{CE(sat)} - I_C$



$V_{BE(on)} - I_C$

