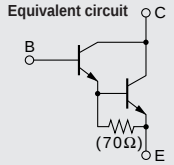


Darlington



Silicon NPN Triple Diffused Planar Transistor (Complement to type 2SB1685)

Application : Audio, Series Regulator and General Purpose

■ Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
VCBO	110	V
VCEO	110	V
VEBO	5	V
IC	6	A
IB	1	A
PC	60(Tc=25°C)	W
Tj	150	°C
Tstg	-55 to +150	°C

■Electrical Characteristics (Ta=25°C)

Symbol	Conditions	Ratings	Unit
ICBO	$V_{CB}=110V$	100max	μA
IEBO	$V_{EB}=5V$	100max	μA
$V_{(BR)CEO}$	$I_C=30mA$	110min	V
h_{FE}	$V_{CE}=4V, I_C=5A$	5000min*	
$V_{CE(sat)}$	$I_C=5A, I_B=5mA$	2.5max	V
$V_{BE(sat)}$	$I_C=5A, I_B=5mA$	3.0max	V
f _T	$V_{CE}=12V, I_E=-2A$	60typ	MHz
COB	$V_{CB}=10V, f=1MHz$	55typ	pF

*hFE Rank $\bar{O}$ (5000to12000), P(6500to20000), Y(15000to30000)

■ Typical Switching Characteristics (Common Emitter)

V _{CC} (V)	R _L (Ω)	I _C (A)	V _{BB1} (V)	V _{BB2} (V)	I _{B1} (mA)	I _{B2} (mA)	t _{on} (μs)	t _{stg} (μs)	t _f (μs)
30	6	5	10	-5	5	-5	0.8typ	6.2typ	1.1typ

External Dimensions MT-100(TO3P)

