



SANYO SEMICONDUCTOR

TIP41, TIP41A, TIP41B, TIP41C
TIP42, TIP42A, TIP42B, TIP42C

COMPLEMENTARY SILICON PLASTIC POWER TRANSISTORS

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

	TIP41	41A	41B	41C	
	TIP42	42A	42B	42C	
COLLECTOR-BASE VOLTAGE	40	60	80	100	V
COLLECTOR-EMITTER VOLTAGE	40	60	80	100	V
EMITTER-BASE VOLTAGE			5.0		V
COLLECTOR CURRENT (DC)			6.0		A
(PEAK)			10.0		A
TOTAL POWER DISSIPATION (Tc=25°C)			65		W
(Ta=25°C)			1.75		W
JUNCTION TEMPERATURE			150		°C
STORAGE TEMPERATURE			-55 to +150		°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

		MIN.	MAX.	
COLLECTOR-EMITTER VOLTAGE	V _{CEO}			
(I _C =30mA, I _B =0)	TIP41, TIP42	40		V
	TIP41A, TIP42A	60		V
	TIP41B, TIP42B	80		V
	TIP41C, TIP42C	100		V
COLLECTOR CUTOFF CURRENT	I _{CEO}			
(V _{CE} =30V, I _B =0)	TIP41, 41A, 42, 42A		0.7	mA
(V _{CE} =60V, I _B =0)	TIP41B, 41C, 42B, 41C		0.7	mA
COLLECTOR CUTOFF CURRENT	I _{CES}			
(V _{CE} =40V, V _{EB} =0)	TIP41, TIP42		0.4	mA
(V _{CE} =60V, V _{EB} =0)	TIP41A, TIP42A		0.4	mA
(V _{CE} =80V, V _{EB} =0)	TIP41B, TIP42B		0.4	mA
(V _{CE} =100V, V _{EB} =0)	TIP41C, TIP42C		0.4	mA
EMITTER CUTOFF CURRENT	I _{EBO}			
(V _{BE} =5V, I _C =0)			1.0	mA
DC CURRENT GAIN	h _{FE}			
(V _{CE} =4V, I _C =0.3A)		30		
(V _{CE} =4V, I _C =3.0A)		20	100	
COLLECTOR-EMITTER SATURATION	V _{CE} (SAT)			
(I _C =6A, I _B =0.6A)			1.8	V
BASE-EMITTER ON VOLTAGE	V _{BE} (ON)			
(V _{CE} =4V, I _C =6A)			2.0	V
GAIN-BAND WIDTH PRODUCT	f _T			
(V _{CE} =10V, I _C =0.5A)		3		MHz

OUTLINE DIMENSION



