

UTCA1012 SILICON PNP EPITAXIAL TRANSISTOR

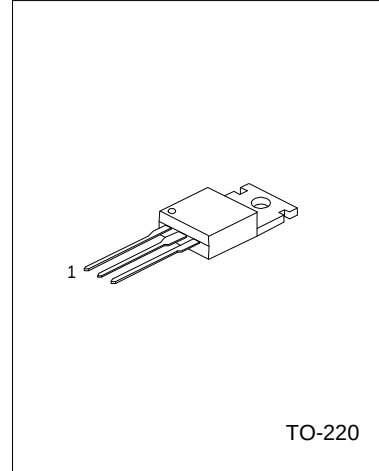
SILICON PNPEPITAXIAL TRANSISTOR

DESCRIPTION

The A1012 is designed for silicon current switching application.

FEATURES

- *Low collector saturation voltage
 $V_{ce(sat)} = -0.4V$ (MAX.) at $I_c = -3A$
- *High speed switching time
 $T_{stg} = 1.0\mu s$ (Typ.)
- *Complementary to 2SC2562



1:BASE 2: COLLECTOR 3: EMITTER

ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	60	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	5	V
Total Power Dissipation($T_a = 25^\circ C$)	P_c	25	W
Collector current	I_c	3	A
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{STG}	-55 ~ +150	$^\circ C$

ELECTRICAL CHARACTERISTICS($T_a = 25^\circ C$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-emitter breakdown voltage	BV_{CEO}	$I_c = 50mA$	60			V
Collector cut-off current	I_{CBO}	$V_{CB} = 50V$			100	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5V$			100	μA
Collector-emitter saturation voltage	$V_{CE(SAT)}$	$I_c = 3A, I_b = 0.3A$			1	V
Collector-emitter on voltage	$V_{CE(ON)}$	$V_{CE} = 5V, I_c = 0.5A$		0.7	1	V
DC current gain	h_{FE1}	$I_c = 0.5A, V_{CE} = 5V$	60		300	
	h_{FE2}	$I_c = 3A, V_{CE} = 5V$	20			
Current gain bandwidth product	f_T	$V_{CE} = 5V, I_c = 0.5A$		9		MHZ