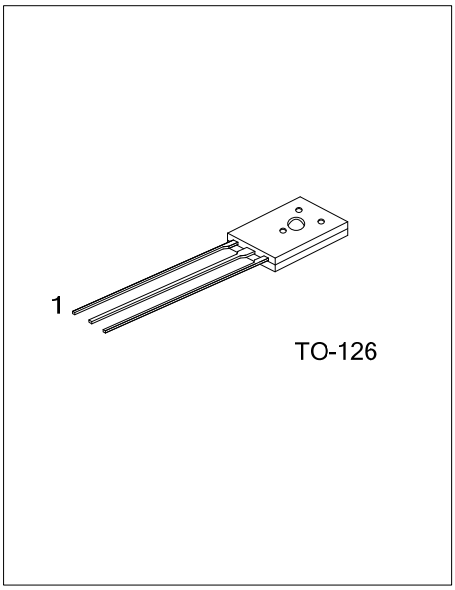
NPN EPITAXIAL SILICON TRANSISTOR



■ DESCRIPTION

The UTC **BD435** is a NPN epitaxial silicon transistor, it uses UTC's advanced technology to provide the customers with high DC current gain, etc.

The UTC **BD435** is suitable for medium power linear and switching applications.

■ FEATURES

* High DC current gain

■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
BD435L-T60-K	BD435G-T60-K	TO-126	K	A	G	Bulk
BD435L-T60-K	BD435G-T60-K	TO-126	K	A	G	Bulk

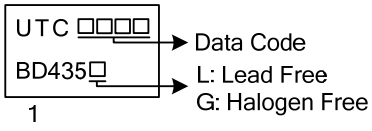
Note: Pin assignment: G: Gate K: Cathode A: Anode

BD435L-T60-K

(1) Packing Type
(2) Package Type
(3) Green Package

(1) K: Bulk
(2) T60: TO-126
(3) L: Lead Free, G: Halogen Free and Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_C=25°C, unless otherwise noted)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	32	V
Collector-Emitter Voltage	V_{CEO}	32	V
Collector-Emitter Voltage	V_{CES}	32	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current (DC)	I_C	4	A
Collector Current (Pulse) (Note 1)	I_{CP}	7	A
Base Current	I_B	1	A
Collector Dissipation (T_C=25°C)	Pc	36	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-65 ~150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T_C=25°C, unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	I_C=100mA, I_B=0A	32			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=32V, I_E=0			100	μA
Collector Cut-Off Current	I_{CEO}	V_{CE}=32V, V_{BE}=0			100	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=5V, I_C=0			1	mA
DC Current Gain (Note 1)	h_{FE}	V_{CE}=5V, I_C=10mA	40	130		
		V_{CE}=1V, I_C=500mA	85	140		
		V_{CE}=1V, I_C=2A	50			
Collector-Emitter Saturation Voltage (Note 1)	$V_{CE(SAT)}$	I_C=2A, I_B=0.2A		0.2	0.5	V
Base-Emitter ON Voltage (Note 1)	$V_{BE(ON)}$	V_{CE}=1V, I_C=2A			1.1	V
Current Gain Bandwidth Product	f_T	V_{CE}=1V, I_C=250mA	3			MHz

Note: Pulse Test: P_W=300μs, duty Cycle=1.5% Pulsed