UNISONIC TECHNOLOGIES CO., LTD

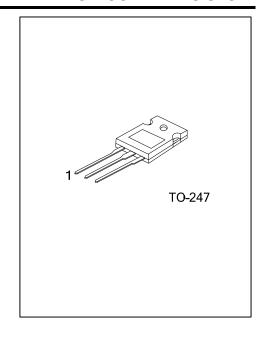
2N3055

NPN SILICON TRANSISTOR

SILICON NPN TRANSISTORS

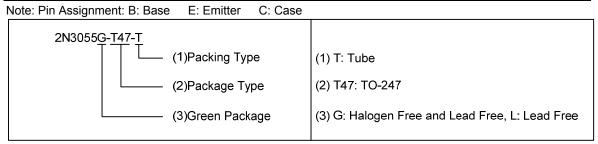
■ DESCRIPTION

The UTC **2N3055** is a silicon NPN transistor in TO-247 metal case. It is intended for power switching circuits, series and shunt regulators, output stages and high fidelity amplifiers.

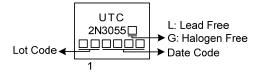


ORDERING INFORMATION

Ordering Number		Dookogo	Pin Assignment			Dooking	
Lead Free	Halogen Free	Package	1	2	3	Packing	
2N3055L-T47-T	2N3055G-T47-T	TO-247	В	С	E	Tube	



■ MARKING



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■ **ABSOLUTE MAXIMUM RATINGS** (T_A=25°C ,unless otherwise specified)

PARAMETERS	SYMBOL	VALUE	UNITS
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	$V_{\sf CEO}$	60	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector-Emitter Voltage	$V_{\sf CEV}$	70	V
Collector Current	Ic	15	Α
Collector Peak Current (Note)	I _{CM}	15	Α
Base Current	Ι _Β	7	Α
Base Peak Current (Note)	I _{BM}	15	Α
Total Dissipation at T _A =25°C	P_D	90	W
Max. Operating Junction Temperature	T _J	200	°C
Storage Temperature	T _{STG}	-65 ~ 200	°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_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT		
OFF CHARACTERISTICS								
Collector-Emitter Sustaining Voltage	$V_{\text{CEO}(\text{sus})}$	I _C =200mA, I _B =0V	60			٧		
Collector-Emitter Sustaining Voltage	$V_{\text{CER(sus)}}$	I _C =0.2 A, R _{BE} =100 Ohms	70			V		
Collector Cut-off Current	I _{CEO}	V _{CE} =30V, I _B =0			0.7	mA		
Collector Cut-off Current (T _A =150°C)	I	V _{CE} =100V, V _{BE(off)} =1.5V			1.0	mA		
Collector Cut-on Current (1A-130 C)	I _{CEX}	V _{CE} =100V, V _{BE(off)} =1.5V			5.0	mA		
Emitter Cut-off Current	I _{EBO}	V_{BE} =7V, I_{C} =0			5.0	mA		
ON CHARACTERISTICS								
DC Current Gain(note)	h _{FE}	I _C =4A, V _{CE} =4V	20		70			
		I _C =10A, V _{CE} =4V	5					
Collector Emitter Seturation Voltage	V _{CE(sat)}	I _C =4A, I _B =400mA			1.1	V		
Collector-Emitter Saturation Voltage		I _C =10A, I _B =3.3A			3.0	V		
Base-Emitter On Voltage	$V_{BE(on)}$	I _C =4A, V _{CE} =4V			1.5	V		
SECOND BREAKDOWN								
Second Breakdown Collector with	ls/b	V _{CE} =60V, T=1.0s, Non-repetitive	2.87			Α		
Base Forward Biased	15/10					^		
DYNAMIC CHARACTERISTICS								
Current Gain-Bandwidth Product	f_T	I _C =0.5A, V _{CE} =10V, f=1MHz	2.5			MHz		
Small-Signal Current Gain	h _{FE}	I _C =1A, V _{CE} =4V, f=1kHz	15		120			
Small-Signal Current Gain Cut-off Frequency	f _{HFE}	I _C =1A, V _{CE} =4V, f=1.0kHz	10			kHz		

Note: Pulse Test: Puls Width \leq 300 μ s, Duty Cycle \leq 2%

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