

# 2SA814 2SA815

## SILICON PNP EPITAXIAL BASE MESA TYPE

MEDIUM POWER AMPLIFIER APPLICATIONS.  
DRIVER STAGE AMPLIFIER APPLICATIONS.

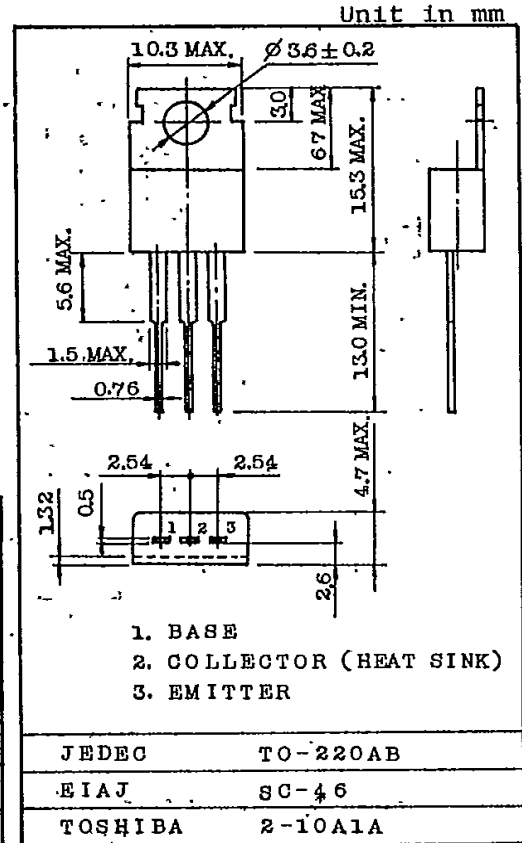
**FEATURES:**

- High Breakdown Voltage:  $V_{CE0} = -120V$  (2SA814)  
:  $V_{CE0} = -100V$  (2SA815)
- Complementary to 2SC1624 and 2SC1625.

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**MAXIMUM RATINGS (Ta=25°C)**

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	2SA814	VCBO	-120	V
	2SA815		-100	
Collector-Emitter Voltage	2SA814	VCE0	-120	V
	2SA815		-100	
Emitter-Base Voltage		VEBO	-5	V
Collector Current		IC	-1	A
Emitter Current		IE	1	A
Collector Power Dissipation (Tc=25 °C)		Pc	15	W
Junction Temperature		Tj	150	°C
Storage Temperature Range		Tstg	-55~150	°C



Mounting Kit No. AC75  
Weight : 1.9g

**ELECTRICAL CHARACTERISTICS (Ta=25°C)**

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	ICBO	$V_{CB} = -50V, I_E = 0$	-	-	-1.0	μA
Emitter Cut-off Current	IEBO	$V_{EB} = -5V, I_C = 0$	-	-	-1.0	μA
Collector-Emitter Breakdown Voltage	V(BR)CEO	$I_C = -10mA, I_B = 0$	-120	-	-	V
			-100	-	-	
Emitter-Base Breakdown Voltage	V(BE)EBO	$I_E = -1mA, I_C = 0$	-5	-	-	V
DC Current Gain	hFE(1) (Note)	$V_{CE} = -5V, I_C = -150mA$	70	-	240	V
	hFE(2)	$V_{CE} = -5V, I_C = -500mA$	40	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -500mA, I_B = -50mA$	-	-	-0.5	V
Base-Emitter Voltage	VBE	$V_{CE} = -5V, I_C = -500mA$	-	-	-1.0	V
Transition Frequency	fT	$V_{CE} = -5V, I_C = -150mA$	10	30	-	MHz
Collector Output Capacitance	Cob	$V_{CB} = -10V, I_E = 0, f = 1MHz$	-	30	-	pF

Note: hFE(1) Classification 0 : 70~140, Y : 120~240

TOSHIBA CORPORATION

