

**2SC522**  
**2SC524**

Unit in mm

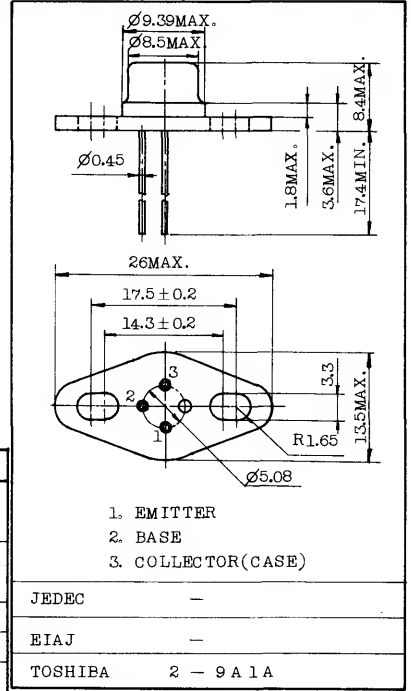
HIGH FREQUENCY AMPLIFIER APPLICATIONS.  
HIGH VOLTAGE SWITCHING APPLICATIONS.  
REGULATOR APPLICATIONS.

FEATURES:

- High Breakdown Voltage :  $V_{CE0}=100V$  (2SC522)  
:  $V_{CE0}= 60V$  (2SC524)
- Useful attachment for Heat sink.
- Various Uses for Medium Power  
:  $I_C=1.5A$  (Max.),  $P_C=10W$  (Max.)

MAXIMUM RATINGS ( $T_a=25^\circ C$ )

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	2SC522	$V_{CB0}$	140	V
	2SC524		100	
Collector-Emitter Voltage	2SC522	$V_{CE0}$	100	V
	2SC524		60	
Emitter-Base Voltage		$V_{EB0}$	5	V
Collector Current		$I_C$	1.5	A
Base Current		$I_B$	300	mA
Collector Power Dissipation ( $T_c=25^\circ C$ )		$P_C$	10	W
Junction Temperature		$T_j$	175	$^\circ C$
Storage Temperature Range		$T_{stg}$	-65~175	$^\circ C$



Mounting kit No. AC26C  
Weight : 3.7g

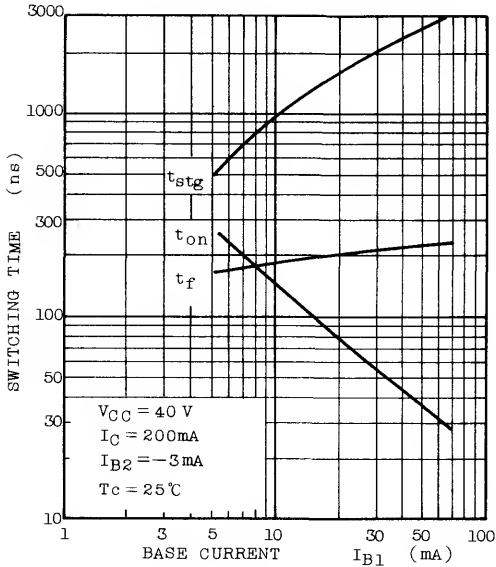
ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ C$ )

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		$I_{CB0}$	$V_{CB}=30V, I_E=0$	-	-	1	$\mu A$
Emitter Cut-off Current		$I_{EB0}$	$V_{EB}=5V, I_C=0$	-	-	10	$\mu A$
DC Current Gain		$h_{FE(1)}$ (Note)	$V_{CE}=2V, I_C=200mA$	30	-	150	
		$h_{FE(2)}$	$V_{CE}=5V, I_C=1A$	15	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=200mA, I_B=20mA$	-	0.2	0.6	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=200mA, I_B=20mA$	-	0.8	1.0	V
Transition Frequency		$f_T$	$V_{CE}=10V, I_C=30mA$	20	60	-	MHz
Collector Output Capacitance		$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	25	40	pF
Switching Time	Turn-on Time	$t_{on}$		-	0.13	-	$\mu s$
	Storage Time	$t_{stg}$		-	3	-	
	Fall Time	$t_f$		-	0.2	-	

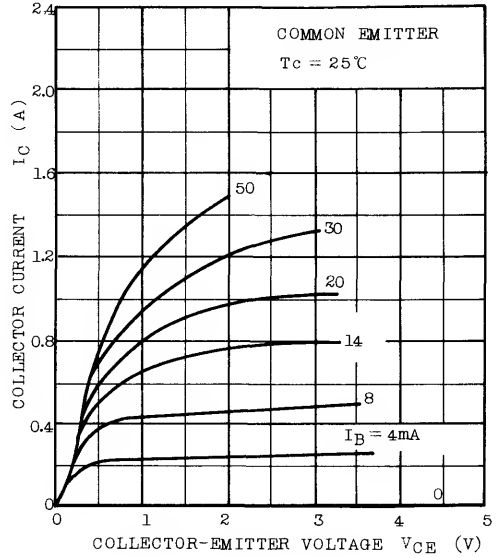
Note :  $h_{FE(1)}$  Classification R : 30~90, 0 : 50~150

# 2SC522·2SC524

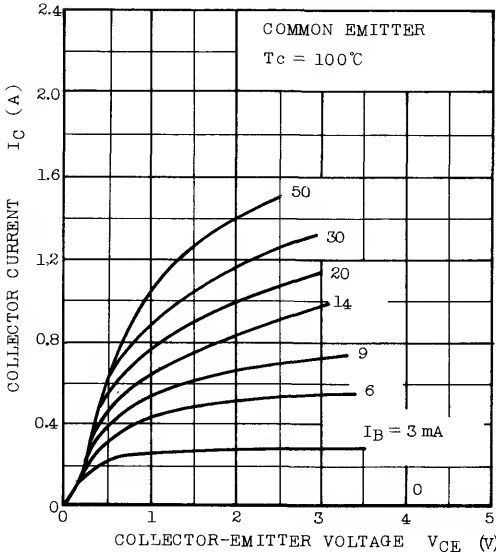
SWITCHING CHARACTERISTICS



$I_C - V_{CE}$



$I_C - V_{CE}$



$I_C - V_{CE}$

