

# 2SC3257

SILICON NPN TRIPLE DIFFUSED TYPE

SWITCHING REGULATOR AND HIGH VOLTAGE SWITCHING APPLICATIONS.

INDUSTRIAL APPLICATIONS

Unit in mm

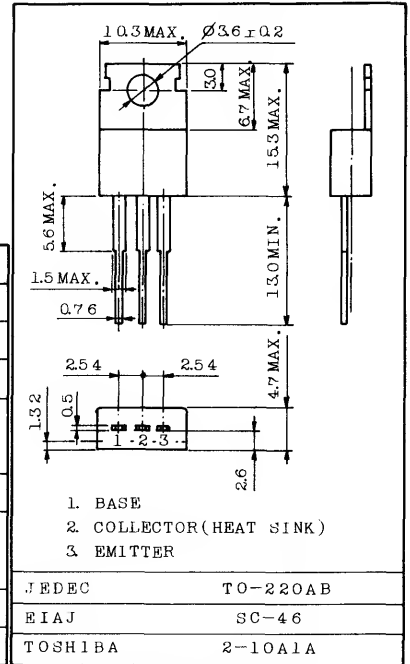
HIGH SPEED DC-DC CONVERTER APPLICATION.

**FEATURES:**

- Excellent Switching Times  
:  $t_r=1.0\mu s(\text{Max.})$ ,  $t_f=1.0\mu s(\text{Max.})$  at  $I_C=6A$
- High Collector Breakdown Voltage :  $V_{CE0}=200V$

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

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		$V_{CBO}$	250	V
Collector-Emitter Voltage		$V_{CEO}$	200	V
Emitter-Base Voltage		$V_{EBO}$	7	V
Collector Current	DC	$I_C$	10	A
	Pulse	$I_{CP}$	15	A
Base Current		$I_B$	2	A
Collector Power Dissipation	$T_a=25^\circ C$	$P_C$	1.5	W
	$T_c=25^\circ C$		40	
Junction Temperature		$T_j$	150	$^\circ C$
Storage Temperature Range		$T_{stg}$	-55 ~ 150	$^\circ C$



Mounting Kit No. AC75

Weight : 1.9g

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

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		$I_{CBO}$	$V_{CB}=200V, I_E=0$	-	-	100	$\mu A$
Emitter Cut-off Current		$I_{EBO}$	$V_{EB}=7V, I_C=0$	-	-	1	mA
Collector-Base Breakdown Voltage		$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	250	-	-	V
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	200	-	-	V
DC Current Gain		$h_{FE}$	$V_{CE}=5V, I_C=10mA$	15	-	-	
			$V_{CE}=5V, I_C=5A$	20	-	80	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=5A, I_B=0.5A$	-	-	1.0	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=5A, I_B=0.5A$	-	-	1.5	V
Switching Time	Rise Time	$t_r$		-	-	1.0	$\mu s$
	Storage Time	$t_{stg}$		-	-	2.5	
	Fall Time	$t_f$		-	-	1.0	

