

## SEMICONDUCTOR TECHNICAL DATA

## KTA1716 EPITAXIAL PLANAR PNP TRANSISTOR

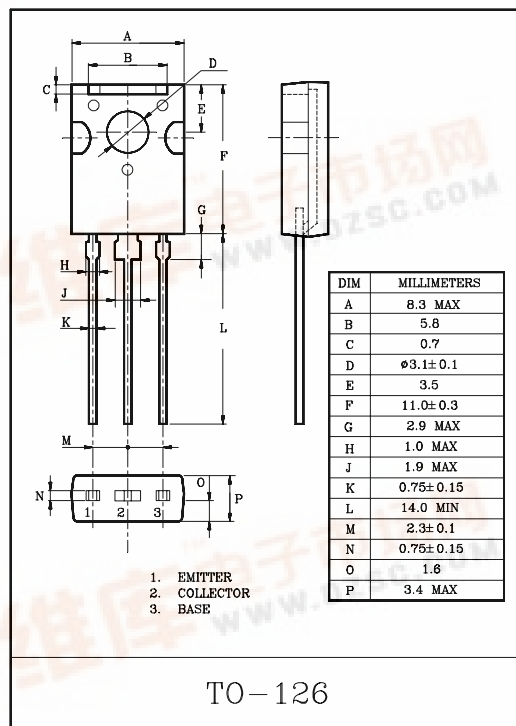
HIGH-VOLTAGE SWITCHING TRANSISTOR  
TELEPHONE POWER-SUPPLY USE.

### FEATURES

- High Breakdown Voltage.  
:  $V_{CE0} = -600V$
- Low  $V_{CE(sat)}$  (Typ.  $-0.25V$ ) ( $I_C = -300mA$ ,  $I_B = -60mA$ ).
- Fast Switching.
- Wide SOA.

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-600	V
Collector-Emitter Voltage	$V_{CEO}$	-600	V
Emitter-Base Voltage	$V_{EBO}$	-7	V
Collector Current	DC	$I_C$	-1
	Pulse	$I_{CP}$	-2
Collector Power Dissipation	$P_C$	1.5	W
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 ~ 150	$^\circ C$



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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -600V$ , $I_E = 0$	-	-	-1.0	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -7V$ , $I_C = 0$	-	-	-1.0	$\mu A$
DC Current Gain	$h_{FE} 1$ (Note)	$V_{CE} = -5V$ , $I_C = -100mA$	56	-	180	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -300mA$ , $I_B = -60mA$	-	-	-1.0	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -300mA$ , $I_B = -60mA$	-	-	-1.2	V
Transition Frequency	$f_T$	$V_{CB} = -10V$ , $I_E = 50mA$ , $f = 5MHz$	-	15	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10V$ , $I_E = 0$ , $f = 1MHz$	-	40	-	pF
Switching Time	Turn On Time	$t_{on}$ $I_C = -500mA$ , $R_C = 500\Omega$	-	0.2	-	$\mu S$
	Storage Time	$t_{stg}$ $I_{B1} = -I_{B2} = -100mA$	-	1.8	-	
	Fall Time	$t_f$ $V_{CC} = -250V$	-	0.4	-	