

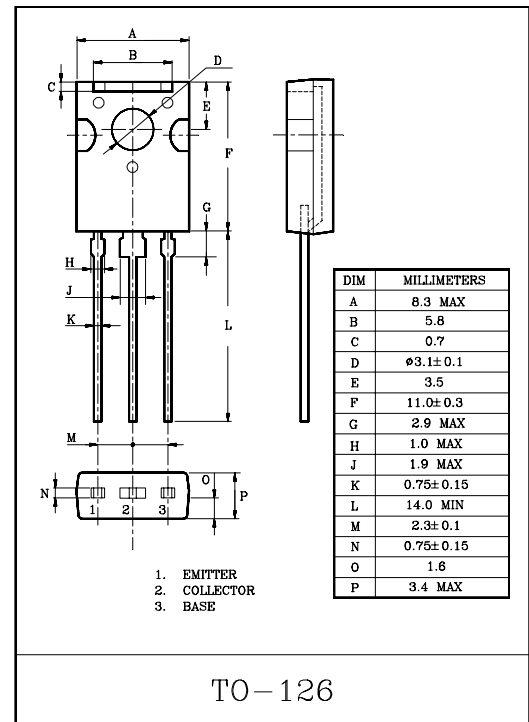
HIGH-VOLTAGE SWITCHING TRANSISTOR
TELEPHONE POWER-SUPPLY USE.

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	A
	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}	$V_{CB} = -600V$, $I_B = 0$	-	-	-1.0	μA
Emitter Cut-off Current		I_{EBO}	$V_{EB} = -7V$, $I_C = 0$	-	-	-1.0	μA
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	-	μS
	Storage Time	t_{stg}	$I_{B1} = -I_{B2} = -100mA$	-	1.8	-	
	Fall Time	t_f	$V_{CC} \approx -250V$	-	0.4	-	