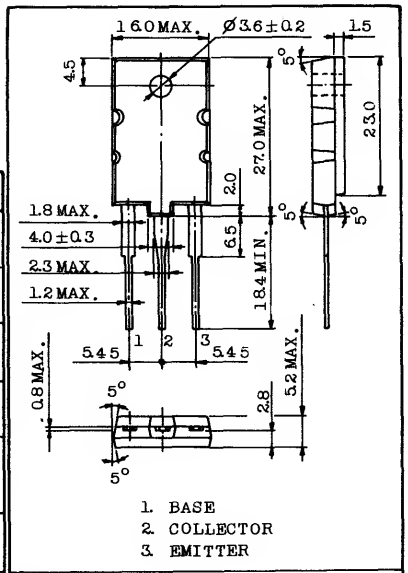
S2056

SILICON NPN TRIPLE DIFFUSED MESA TYPE

TV HORIZONTAL OUTPUT APPLICATIONS.

FEATURES:
- High Voltage : V_{CES}=1500V
- High Speed : t_f=0.75μs (Typ.)
- Glass Passivated Collector-Base Junction

Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	2-16D1A

Weight : 5.2g

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Emitter Voltage (V_{BE}=0V)		V_{CES}	1500	V
Collector-Emitter Voltage (R_{BE}=100Ω)		V_{CER}	1500	V
Transient Collector-Emitter Voltage (Flash-over)		VCE (Flash-over)	1650	V
Collector-Emitter Voltage (Open Base)		V_{CEO}	700	V
Collector Current	DC	I_C	2.5	A
	Peak	I_{CM}	3	
Transient Collector Current (Flash-over)		I_C (Flash-over)	5	A
Base Current (Peak)		I_{BM}	2.5	A
Reverse Base Current	DC	$-I_B$	100	mA
	Peak	$-I_{BM}$	1.5	A
Collector Power Dissipation ($T_c \leqq 90°C$)		P_C	10	W
Junction Temperature		T_j	115	°C
Storage Temperature Range		T_{stg}	-65~115	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CES}	V_{BE}=0, V_{CE}=VCES	-	-	1	mA
DC Current Gain	h_{FE}	V_{CE}=5V, I_C=2A	2	-	-	
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	I_E=100mA	5	-	-	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=2A, I_B=1A	-	-	5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=2A, I_B=1A	-	-	1.5	V
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	I_C=100mA, L=25mH	700	-	-	V
Fall Time	t_f	I_{CP}=2A, $I_{B(end)}$=1A	-	0.75	-	μs
Collector Output Capacitance	C_{ob}	V_{CB}=10V, f=1MHz	-	95	-	pF
Transition Frequency	f_T	V_{CE}=5V, f=5MHz, I_C=0.1A	-	3	-	MHz