

**KSC5088**

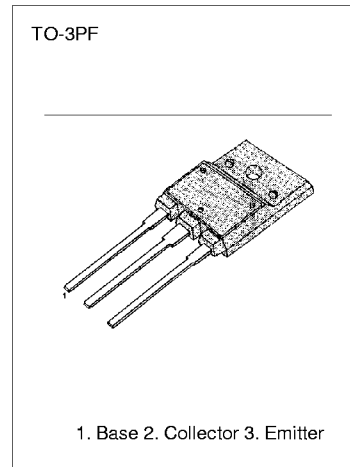
**NPN TRIPLE DIFFUSED  
PLANAR SILICON TRANSISTOR**

**HIGH DEFINITION COLOR DISPLAY  
HORIZONTAL DEFLECTION OUTPUT  
(WITHOUT DAMPER DIODE)**

- High Collector -Base Voltage ( $V_{CBO}=1500V$ )
- High Speed Switching ( $t_f(\text{typ}) = 0.1 \mu s$ )

**ABSOLUTE MIXIMUM RATING**

Characteristic	Symbol	Rating	Unit
Collector Base Voltage	$V_{CBO}$	1500	V
Collector Emitter Voltage	$V_{CEO}$	800	V
Emitter Base Voltage	$V_{EBO}$	6	V
Collector Current (DC)	$I_C$	8	A
Collector Current (Pulse)	$I_C$	15	A
Base Current	$I_B$	4	A
Collector Dissipation ( $T_C=25^\circ C$ )	$P_C$	50	W
Junction Temperature	$T_J$	150	$^\circ C$
Storage Temperature	$T_{STG}$	-55 ~ 150	$^\circ C$



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

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	$I_{CBO}$	$V_{CB} = 800V, I_E = 0$			10	$\mu A$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB} = 4V, I_C = 0$			1	mA
DC Current Gain	$h_{FE1}$	$V_{CE} = 5V, I_C = 1A$	8			
	$h_{FE2}$	$V_{CE} = 5V, I_C = 6A$	5			
Collector Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 6A, I_B = 1.5A$			5.0	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 6A, I_B = 1.5A$			1.5	V
Current-Gain Bandwidth Product	$f_T$	$V_{CE} = 10V, I_C = 1A$		3		MHz
Storage Time	$t_{STG}$	$V_{CC} = 200V, I_C = 6A$			3.0	$\mu S$
Fall Time	$t_F$	$I_{B1} = 1.2A, I_{B2} = -2.4A$			0.2	$\mu S$

**THERMAL CHARACTERISTICS**

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Case	$R_{\theta jC}$	2.49	$^\circ C / W$