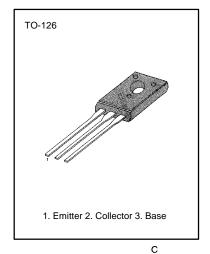
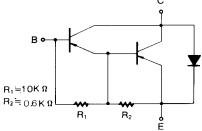
# HIGH DC CURRENT GAIN MIN h<sub>FE</sub>= 750 @l<sub>C</sub>= 1.5 and 2.0A DC MONOLITHIC CONSTRUCTION WITH BUILT-IN BASE-EMITTER RESISTORS

• Complement to KSE700/701/702/703

## **ABSOLUTE MAXIMUM RATINGS**

Characteristic	Symbol	Rating	Unit
Collector- Base Voltage	$V_{CBO}$		
: KSE800/801		60	V
: KSE802/803		80	V
Collector-Emitter Voltage	$V_{CEO}$		
: KSE800/801		60	V
: KSE802/803		80	V
Emitter- Base Voltage	$V_{EBO}$	5	V
Collector Current	Ic	4	Α
Base Current	I <sub>B</sub>	0.1	Α
Collector Dissipation (T <sub>C</sub> =25°C)	Pc	40	W
Junction Temperature	TJ	150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~ 150	°C

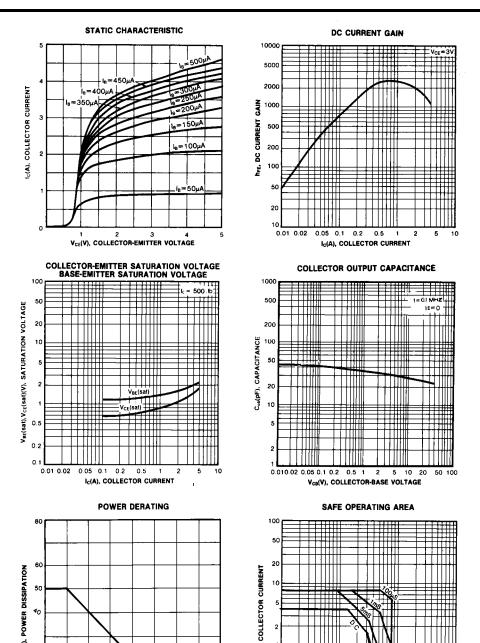




# **ELECTRICAL CHARACTERISTICS** (T<sub>c</sub>=25°C)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector Emitter Breakdown Voltage	BV <sub>CEO</sub>	$I_C = 50 \text{mA}, I_B = 0$			
: KSE800/801			60		V
: KSE802/803			80		V
Collector Cutoff Current	I <sub>CEO</sub>				
: KSE800/801		$V_{CE} = 60V, I_{B} = 0$		100	μΑ
: KSE802/803		$V_{CE} = 80V, I_{B} = 0$		100	μΑ
Collector Cutoff Current	I <sub>CBO</sub>	$V_{CB} = Rated BV_{CEO}, I_E = 0$		100	μΑ
		$V_{CB} = Rated BV_{CEO}, I_E = 0$		500	μA
		T <sub>C</sub> = 100°C			·
Emitter Cutoff Current	I <sub>EBO</sub>	$V_{BE} = 5V, I_{C} = 0$		2	mA
DC Current Gain : KSE800/802	h <sub>FE</sub>	$V_{CE} = 3V, I_{C} = 1.5A$	750		
: KSE801/803		$V_{CE} = 3V, I_{C} = 2A$	750		
: ALL DEVICES		$V_{CE} = 3V$ , $I_C = 4A$	100		
Collector-Emitter Saturation Voltage	V <sub>CE</sub> (sat)				
: KSE800/802		$I_C = 1.5A$ , $I_B = 30mA$		2.5	V
: KSE801/803		$I_C = 2A$ , $I_B = 40mA$		2.8	V
: ALL DEVICES		$I_C = 4A, I_B = 40mA$		3	V
Base-Emitter On Voltage	V <sub>BE</sub> (on)				
: KSE800/802		$V_{CE} = 3V, I_{C} = 1.5A$		1.2	V
: KSE801/803		$V_{CE} = 3V, I_{C} = 2A$		2.5	V
: ALL DEVICES		$V_{CE} = 3V$ , $I_C = 4A$		3	V





0.5

5 10 20

50 100 200 500 1000

V<sub>CE</sub>(V), COLLECTOR-EMITTER VOLTAGE

175 200

125 150

Tc(°C), CASE TEMPERATURE



25

50

75 100

P<sub>□</sub>(₩),

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FACT Quiet Series  $^{\text{TM}}$  Quiet Series  $^{\text{TM}}$  SuperSOT  $^{\text{TM}}$ -3 SuperSOT  $^{\text{TM}}$ -6 GTO  $^{\text{TM}}$  SuperSOT  $^{\text{TM}}$ -8 HiSeC  $^{\text{TM}}$  TinyLogic  $^{\text{TM}}$ 

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