



6367254 MOTOROLA SC (XSTRS/R F)

96D 80695 D

T-33-13

**ELECTRICAL CHARACTERISTICS** ( $T_C = 25^\circ\text{C}$  unless otherwise noted)

Characteristic	Symbol	Min.	Max.	Unit
<b>OFF CHARACTERISTICS (1)</b>				
Collector-Emitter Sustaining Voltage ( $I_C = 500\text{ mAdc}$ , $I_B = 0$ ) $L = 10\text{ mH}$	$V_{CE(sus)}$	700		Vdc
Collector Cutoff Current at Reverse Bias: ( $V_{CE} = 1000\text{ V}$ , $I_E = 0$ ) ( $V_{CE} = 1500\text{ V}$ , $I_E = 0$ )	$I_{CBO}$		0.02 1.0	mAdc
Collector-Emitter Cutoff Current ( $V_{CE} = 1500\text{ V}$ , $V_{BE} = -2\text{ V}$ )	$I_{CEX}$		1.0	mAdc
Emitter-Base Reverse Voltage ( $I_E = 100\text{ mA}$ )	$V_{EBO}$	5		V
Emitter Cutoff Current ( $V_{EB} = 4\text{ V}$ )	$I_{EBO}$		10	mAdc

**ON CHARACTERISTICS (1)**

DC Current Gain ( $I_C = 4.5\text{ Adc}$ , $V_{CE} = 5\text{ V}$ )	$h_{FE}$	3.0		-
Collector-Emitter Saturation Voltage ( $I_C = 4.5\text{ Adc}$ , $I_B = 2\text{ A}$ )	$V_{CE(sat)}$		1.0	Vdc
Base-Emitter On Voltage ( $I_C = 4.5\text{ Adc}$ , $V_{CE} = 2\text{ A}$ )	$V_{BE(on)}$		1.3	Vdc

**SWITCHING CHARACTERISTICS (Resistive Load)**

	( $V_{CC} = 100\text{ Vdc}$ , $I_C = 4.5\text{ A}$ , $I_{B1} = 1.5\text{ A}$ , $I_{B2} = 1.5\text{ A}$ )			$\mu\text{s}$
Storage Time		-	1.2	
Fall Time		-	1.0	



(1) Pulse Test: Pulse Width =  $300\ \mu\text{s}$ , Duty Cycle  $\leq 2\%$