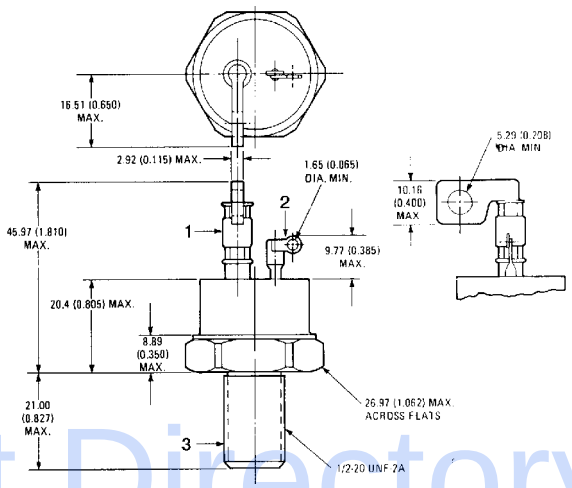
SILICON CONTROLLED RECTIFIER (SCR)

DESCRIPTION:

The **2N1793** is Designed for General Purpose Industrial Power Control Applications.

PACKAGE STYLE TO- 83



MAXIMUM RATINGS

$I_{T(RMS)}$	110 A
V_{DRM}	100 V
V_{RSM}	150 V
P_{DISS}	250 W
T_J	-40 to +125^{O}C
T_{STG}	-40 to +150^{O}C
θ_{JC}	0.4^{O}C/W

CHARACTERISTICS $T_J = 25^{O}C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
I_{DRM}/I_{RRM}	$V_{DRM} = V_{RRM} = 150$ V			10	mA
I_{GT}	$V_D = 6$ V $R_L = 3\ \Omega$ $V_D = 6$ V $R_L = 3\ \Omega$ $T_C = -40\ ^{O}C$ $V_D = 6$ V $R_L = 3\ \Omega$ $T_C = +125\ ^{O}C$			75 130 40	mA
V_{GT}	$V_D = 6$ V $R_L = 50\ \Omega$ $V_D = 150$ V $R_L = 1000\ \Omega$ $T_C = +125\ ^{O}C$	 0.25		3.0	V
I_H	$V_D = 24$ V $I_T = 2$ A GATE OPEN			100	mA
V_{TM}	$I_{TM} = 15$ A $I_{TM} = 500$ A (PEAK)			2.5	V
I_{TSM}	f = 60 Hz f = 50 Hz			1000 910	A
I^2T	T $\geq$ 8.3 mS T $\geq$ 1.0 mS			4150 2850	$A_{RMS}{}^2S$
dV/dT	$V_D =$ 64 V (Exponential) $T_J = 125\ ^{O}C$			200	V/µS