POWEREX

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DARLINGTON TRANSISTOR MODULES (Continued)

Major Ratings and Characteristics at T_C=25°C (T_J Maximum=150°C)

MAXIMUM RATINGS									ELECTRICAL CHARACTERISTICS		
Transistors							Diodes		Transistors		
									Test Conditions		
Type	$V_{CEO(SUS)}$ Volts	V_{CEV} Volts	Continuous I_C Amperes	Continuous I_B Amperes	P_T Watts	V_{RMS} Isolation Volts	I_{FM} Amperes	I_{FSM} Amperes	I_C Amperes	V_{CE} Volts	h_{FE} Minimum
Non-Isolated Darlington Transistor Modules											
KSC23010	300	350	100	3	415	—	100	1000	100	2	100
KSB23020	300	350	200	6	830	—	200	2000	200	2	100
KSB23030	300	350	300	10	1250	—	300	3000	300	2	100
KSB13060	300	350	600	15	2080	—	—	—	600	2	500
Fast Switching Darlington Transistor Modules											
KSA21K03	1000	1600	30	2	310	—	30	300	30	5	75
KSF24505	450	850	50	3	160	1500	30	300	50	5	100
KSA24505	450	900	50	3	310	—	30	300	50	5	100
Chopper Darlington Transistor Modules											
KQ224503	450	600	30	1.8	250	2500	30	300	30	5	100
KR224503	450	600	30	1.8	250	2500	30	300	30	5	100
KQ221K03	850	1000	30	2	312	2500	30	300	30	5	100
KR221K03	850	1000	30	2	312	2500	30	300	30	5	100
KQ224505	450	600	50	3	312	2500	50	500	50	5	100
KR224505	450	600	50	3	312	2500	50	500	50	5	100
KQ221K05	850	1000	50	3	400	2500	50	500	50	5	100
KR221K05	850	1000	50	3	400	2500	50	500	50	5	100
KQ224575	450	600	75	4.5	355	2500	75	750	75	5	100
KR224575	450	600	75	4.5	355	2500	75	750	75	5	100
KQ221K75	850	1000	75	4	500	2500	75	750	75	5	100
KR221K75	850	1000	75	4	500	2500	75	750	75	5	100
KQ324510	450	600	100	6	620	2500	100	1000	100	2	75
KR324510	450	600	100	6	620	2500	100	1000	100	2	75
KQ421K10	850	1000	100	5	800	2500	100	1000	100	2.8	75
KR421K10	850	1000	100	5	800	2500	100	1000	100	2.8	75
KQ324515	450	600	150	9	690	2500	150	1500	150	2	75
KR324515	450	600	150	9	690	2500	150	1500	150	2	75
KQ421K15	850	1000	150	8	1000	2500	150	1500	150	5	100
KR421K15	850	1000	150	8	1000	2500	150	1500	150	5	100

								THERMAL AND MECHANICAL CHARACTERISTICS					
						Diodes		Interface Per Module	Transistors	Diodes	Weight	Outline Drawings	
Test Conditions			Resistive Load Switching Times										
I_C Amperes	I_B Amperes	$V_{CE(SAT)}$ Volts	t_{on} µs	t_s µs	t_f µs	I_{FM} Amperes	V_{FM} Volts	$R_{\theta CS}$ °C/W	$R_{\theta JC}$ °C/W	$R_{\theta JC}$ °C/W	Grams	Number	Page
100	1	2	2	10	3	100	1.5	0.35	0.3	0.5	87	18	39
200	2	2	2.5	10	3	200	1.5	0.07	0.15	0.25	200	19	40
300	3	2	2	10	3	300	1.85	0.04	0.1	0.25	400	20	40
600	1.2	2	3	15	3	—	—	0.05	0.06	—	400	21	40
30	2	2	4	5	3	30	1.5	—	0.4	0.8	50	22	41
50	1	2	2	5	2	30	1.8	—	0.8	1.2	35	23	41
50	1	2	2	5	2	30	1.8	—	0.4	1.2	50	22	41
30	0.4	2	1.5	12	3	30	1.85	0.15	0.5	2	200	24	41
30	0.4	2	1.5	12	3	30	1.85	0.15	0.5	2	200	25	42
30	0.6	2.5	2.5	15	3	30	1.8	0.15	0.4	1.5	200	26	42
30	0.6	2.5	2.5	15	3	30	1.8	0.15	0.4	1.5	200	27	42
50	0.65	2	1.5	12	3	50	1.75	0.15	0.4	1.3	200	24	41
50	0.65	2	1.5	12	3	50	1.75	0.15	0.4	1.3	200	25	42
50	1	2.5	2.5	15	3	50	1.8	0.15	0.31	1.2	200	26	42
50	1	2.5	2.5	15	3	50	1.8	0.15	0.31	1.2	200	27	42
75	1	2	2.5	12	3	75	1.85	0.15	0.35	1.3	200	24	41
75	1	2	2.5	12	3	75	1.85	0.15	0.35	1.3	200	25	42
75	1.5	2.5	2.5	15	3	75	1.8	0.13	0.25	1.2	250	28	43
75	1.5	2.5	2.5	15	3	75	1.8	0.13	0.25	1.2	250	29	43
100	1.3	2	2	12	3	100	1.75	0.1	0.2	0.65	420	30	43
100	1.3	2	2	12	3	100	1.75	0.1	0.2	0.65	420	31	44
100	2	2.5	3	15	3	100	1.8	0.075	0.155	0.65	470	32	44
100	2	2.5	3	15	3	100	1.8	0.075	0.155	0.65	470	33	44
150	2	2	2.5	12	3	150	1.85	0.1	0.18	0.6	420	30	43
150	2	2	2.5	12	3	150	1.85	0.1	0.18	0.6	420	31	44
150	2	2.5	3	15	3	150	1.8	0.075	0.125	0.6	470	32	44
150	2	2.5	3	15	3	150	1.8	0.075	0.125	0.6	470	33	44