

PHASE CONTROL SCRs

NATIONAL TYPE NO.	C137		C147		NL-578 NL-579		C45 C46		C50		C52		C50X500 C52X500		C60 C62	
JEDEC NO.									2N1911-16 2N1805-07		2N1793- 1804				2N2025-30	
RMS on state current (A) max.	35		63		63		80		110		110		110		110	
VOLTAGE RANGE	500-1200		100-1200		100-1200		100-1200		100-1200		100-1200		100-700		100-500	
$I_{T(AV)}$ Amps @ 180° conduction @ T_c	22.3 @ 66°		40 @ 102°		40 @ 102°		52 @ 75°		70 @ 62°		70 @ 62°		70 @ 95°		70 @ 88°	
I_{TSM} Peak one cycle surge current (A)	160		1000		1000		800		1000		1000		1500		1000	
I^2t For fusing at 8.3 msec (A ² sec)	340		4150		4150		2600		4150		4150		9340		4150	
V_{TM} Max. peak on-state volts @ peak amps., $T_j = 25^\circ\text{C}$	2.3 @ 70		3.0 @ 500		3.0 @ 500		3.1 @ 500		2.5 @ 500		2.5 @ 500		1.8 @ 500		2.5 @ 500	
di/dt Max. rate-of-current rise (A/ μsec)	150		100		100		100		100		100		100		30	
dv/dt Min. rate-of-voltage rise (V/ μsec)	200		200		50/200		100		200		200		200		30 TYP	
I_{GT} Max. gate trigger current (MA) @ 25°C	40		150		150		75		75		75		150		70	
V_{GT} Max. gate trigger voltage (V) @ 25°C	2.2		3.0		3.0		2.5		2.5		2.5		3.0		2.5	
$R_{\theta JC}$ Max. thermal resistance, junction-to-case (°C/W)	1.0		.35		.35		.4		.4		.4		.3		.3	
T_j Max. junction operating temperature (°C)	125		125		125		125		125		125		120		150	
	100	A	C137A	C147A	NL-578A NL-579A	C45A C46A	2N1911 C50A	2N1793 C52A	C50AX500 C52AX500	2N2025 C62A						
	150	G	C137G			C45G C46G	2N1912 C50G	2N1794 C52G		2N2026 C62G						
	200	B	C137B	C147B	NL-578B NL-579B	C45B C46B	2N1913 C50B	2N1795 C52B	C50BX500 C52BX500	2N2027 C62B						
	250	H	C137H			C45H C46H	2N1914 C50H	2N1796 C52H		2N2028 C62H						
REPETITIVE PEAK	300	C	C137C	C147C	NL-578C NL-579C	C45C C46C	2N1915 C50C	2N1797 C52C	C50CX500 C52CX500	2N2029 C62C						
FORWARD (V_{DRM})	400	D	C137D	C147D	NL-578D NL-579D	C45D C46D	2N1916 C50D	2N1798 C52D	C50DX500 C52DX500	2N2030 C62D						
AND	500	E	C137E	C147E	NL-578E NL-579E	C45E C46E	2N1805 C50E	2N1799 C52E	C50EX500 C52EX500	C60E C62E						
REPETITIVE PEAK REVERSE (V_{RRM}) VOLTAGE	600	M	C137M	C147M	NL-578M NL-579M	C45M C46M	2N1806 C50M	2N1800 C52M	C50MX500 C52MX500							
	700	S	C137S	C147S	NL-578S NL-579S	C45S C46S	2N1807 C50S	2N1801 C52S	C50SX500							
	800	N	C137N	C147N	NL-578N NL-579N	C45N C46N		2N1802 C52N								
	900	T	C137T	C147T	NL-578T NL-579T	C45T C46T		2N1803 C52T								
	1000	P	C137P	C147P	NL-578P NL-579P	C45P C46P		2N1804 C52P								
	1100	PA	C137PA	C147PA	NL-578PA NL-579PA	C45PA C46PA			C50PA C52PA							
	1200	PB	C137PB	C147PB	NL-578PB NL-579PB	C45PB C46PB			C50PB C52PB							
Stud Torque (in-lbs)	30		30		30		150		150		150		150		150	
Package Type	¼" stud		¼" stud		¼" stud		½" stud		½" stud		½" stud		½" stud		½" stud	
Package Outline Number	TO-48		TO-65		TO-65		TO-83, 94		TO-94		TO-83		TO-94, 83		TO-94, 83	