

# LOW POWER THYRISTORS — 10 to 14A

$I_{T(AV)85^{\circ}C}$ 10 A	$I_{TSM}$ 160 A	$I^2t$ 130 A <sup>2</sup> sec	Outline 6	
Type No. dv/dt=20V/ $\mu$ S		dv/dt=200V/ $\mu$ S	$V_{RRM}$	$V_{RSM}$
CR12-051B	CR12-051BA	50	60	
CR12-101B	CR12-101BA	100	120	
CR12-201B	CR12-201BA	200	240	
CR12-301B	CR12-301BA	300	360	
CR12-401B	CR12-401BA	400	480	
CR12-501B	CR12-501BA	500	600	
CR12-601B	CR12-601BA	600	720	
$V_{GT} = 3.0 V$ $I_{GT} = 60 mA$ dl/dt = 100 A/ $\mu$ S				

$I_{T(AV)85^{\circ}C}$ 10 A	$I_{TSM}$ 140 A	$I^2t$ 100 A <sup>2</sup> sec	Outline 2	
Type No.		$V_{RRM}$	$V_{RSM}$	
BTY87-100R		100	150	
BTY87-200R		200	300	
BTY87-300R		300	400	
BTY87-400R		400	500	
BTY87-500R		500	600	
BTY87-600R		600	720	
BTY87-700R		700	850	
BTY87-800R		800	960	
$V_{GT} = 3.5 V$ $I_{GT} = 65 mA$ dv/dt = 20 V/ $\mu$ S dl/dt = 20 A/ $\mu$ S				

$I_{T(AV)85^{\circ}C}$ 10 A	$I_{TSM}$ 160 A	$I^2t$ 130 A <sup>2</sup> sec	Outline 2	
Type No. dv/dt=20V/ $\mu$ S		dv/dt=200V/ $\mu$ S	$V_{RRM}$	$V_{RSM}$
CR12-051C	CR12-051CA	50	60	
CR12-101C	CR12-101CA	100	120	
CR12-201C	CR12-201CA	200	240	
CR12-301C	CR12-301CA	300	360	
CR12-401C	CR12-401CA	400	480	
CR12-501C	CR12-501CA	500	600	
CR12-601C	CR12-601CA	600	720	
$V_{GT} = 3.0 V$ $I_{GT} = 60 mA$ dl/dt = 100 A/ $\mu$ S				

$I_{T(AV)85^{\circ}C}$ 13.5 A	$I_{TSM}$ 200 A	$I^2t$ 200 A <sup>2</sup> sec	Outline 2	
Type No.		$V_{RRM}$	$V_{RSM}$	
2N681		25	35	
2N682		50	75	
2N683		100	150	
2N684		150	225	
2N685		200	300	
2N686		250	350	
2N687		300	400	
2N688		400	500	
2N689		500	600	
2N690		600	720	
2N691		700	840	
2N692		800	960	
$V_{GT} = 2.2 V$ $I_{GT} = 40 mA$ dv/dt = 20 V/ $\mu$ S dl/dt = 50 A/ $\mu$ S				

$I_{T(AV)85^{\circ}C}$ 10 A	$I_{TSM}$ 160 A	$I^2t$ 130 A <sup>2</sup> sec	Outline 6	
Type No. dv/dt=20V/ $\mu$ S		dv/dt=200V/ $\mu$ S	$V_{RRM}$	* $V_{RSM}$
CR12-903RB	CR12-903RBA	800	900	
CR12-1003RB	CR12-1003RBA	900	1000	
CR12-1103RB	CR12-1103RBA	1000	1100	
CR12-1203RB	CR12-1203RBA	1100	1200	
CR12-1303RB	CR12-1303RBA	1200	1300	
CR12-1403RB	CR12-1403RBA	1300	1400	
CR12-1503RB	CR12-1503RBA	1400	1500	
$V_{GT} = 3.0 V$ $I_{GT} = 60 mA$ dl/dt = 100 A/ $\mu$ S				

$I_{T(AV)85^{\circ}C}$ 13.5 A	$I_{TSM}$ 320 A	$I^2t$ 500 A <sup>2</sup> sec	Outline 2	
Type No.		$V_{RRM}$	$V_{RSM}$	
2N5204		600	720	
2N5205		800	960	
2N5206		1000	1200	
2N5207		1200	1440	
$V_{GT} = 2.5 V$ $I_{GT} = 55 mA$ $I_H = 200 mA$ max dv/dt = 100 V/ $\mu$ S dl/dt = 100 A/ $\mu$ S				

$I_{T(AV)85^{\circ}C}$ 10 A	$I_{TSM}$ 160 A	$I^2t$ 130 A <sup>2</sup> sec	Outline 2	
Type No. dv/dt=20V/ $\mu$ S		dv/dt=200V/ $\mu$ S	$V_{RRM}$	* $V_{RSM}$
CR12-903RC	CR12-903RCA	800	900	
CR12-1003RC	CR12-1003RCA	900	1000	
CR12-1103RC	CR12-1103RCA	1000	1100	
CR12-1203RC	CR12-1203RCA	1100	1200	
CR12-1303RC	CR12-1303RCA	1200	1300	
CR12-1403RC	CR12-1403RCA	1300	1400	
CR12-1503RC	CR12-1503RCA	1400	1500	
$V_{GT} = 3.0 V$ $I_{GT} = 60 mA$ dl/dt = 100 A/ $\mu$ S				

$I_{T(AV)85^{\circ}C}$ 14 A	$I_{TSM}$ 240 A	$I^2t$ 290 A <sup>2</sup> sec	Outline 2	
Type No.		$V_{RRM}$	$V_{RSM}$	
BTW47-600RU		600	700	
BTW47-800RU		800	900	
BTW47-1000RU		1000	1100	
BTW47-1200RU		1200	1300	
BTW47-1400RU		1400	1400	
BTW47-1600RU		1600	1600	
$V_{GT} = 3.5 V$ $I_{GT} = 150 mA$ dv/dt = 200 V/ $\mu$ S dl/dt = 100 A/ $\mu$ S				

dv/dt available up to 1000 V/ $\mu$ S. \*Avalanche versions available with  $P_{RSM} = 18 kW$ .

$I_{T(AV)85^{\circ}C}$ <b>14 A</b>	$I_{TSM}$ <b>240 A</b>	$I^2t$ <b>290 A<sup>2</sup>sec</b>	<b>Outline</b> <b>6</b>
Type No.		$V_{RRM}$	$*V_{RSM}$
CR16-051B		50	60
CR16-101B		100	120
CR16-201B		200	240
CR16-301B		300	360
CR16-401B		400	480
CR16-501B		500	600
CR16-601B		600	720
$V_{GT} = 3.0 V$ $I_{GT} = 40 mA$ $dl/dt = 100 A/\mu S$			

$I_{T(AV)85^{\circ}C}$ <b>14 A</b>	$I_{TSM}$ <b>200 A</b>	$I^2t$ <b>200 A<sup>2</sup>sec</b>	<b>Outline</b> <b>2</b>
Type No.		$V_{RRM}$	$V_{RSM}$
BTY91-100R		100	150
BTY91-200R		200	300
BTY91-300R		300	400
BTY91-400R		400	500
BTY91-500R		500	600
BTY91-600R		600	720
BTY91-700R		700	850
BTY91-800R		800	960
$V_{GT} = 3.0 V$ $I_{GT} = 40 mA$ $dv/dt = 20 V/\mu S$ $dl/dt = 20 A/\mu S$			

$I_{T(AV)85^{\circ}C}$ <b>14 A</b>	$I_{TSM}$ <b>240 A</b>	$I^2t$ <b>290 A<sup>2</sup>sec</b>	<b>Outline</b> <b>6</b>
Type No.		$V_{RRM}$	$*V_{RSM}$
$dv/dt = 20V/\mu S$			
$dv/dt = 200V/\mu S$			
CR18-051B		50	60
CR18-101B		100	120
CR18-201B		200	240
CR18-301B		300	360
CR18-401B		400	480
CR18-501B		500	600
CR18-601B		600	720
$V_{GT} = 3.0 V$ $I_{GT} = 40 mA$ $dl/dt = 100 A/\mu S$			

$I_{T(AV)85^{\circ}C}$ <b>14 A</b>	$I_{TSM}$ <b>240 A</b>	$I^2t$ <b>290 A<sup>2</sup>sec</b>	<b>Outline</b> <b>2</b>
Type No.		$V_{RRM}$	$*V_{RSM}$
$dv/dt = 20V/\mu S$			
$dv/dt = 200V/\mu S$			
CR18-051C		50	60
CR18-101C		100	120
CR18-201C		200	240
CR18-301C		300	360
CR18-401C		400	480
CR18-501C		500	600
CR18-601C		600	720
$dl/dt = 100 A/\mu S$ $I_{GT} = 40 mA$			

