



4TH GENERATION POWER MOSFET PRODUCTS

The 4th major development of Power MOSFET technology builds upon and improves upon the previous three series offered to the market. At present, the major types offered by almost all the main manufacturers are 3rd generation.

The 4th Generation MOSFET technology offers major advances:-

- Designed for very fast switching high voltage applications.
- Very Fast fall times – reducing in-circuit losses.
- Excellent $R_{DS(on)}$ for these high voltage devices.
- Low inter-electrode capacitance
- Compact structures taking costs closer to those associated with Bi-Polar solutions.
- Highest power switching capacity to date

These products provide cost effective solutions in most power switching applications – Low Loss, Fast Switching and improved characteristics give the designer freedom to design tough systems that are efficient at reasonable cost.

Both the 4th Generation MOSFETs and the IGBTs are available in a wide range of standard packages and in Custom Power Modules. TO–3PBL package versions are in development.

IGBTs

$V_{CE(s)}$ (V)	$V_{CE(ON)}$ (V)	I_{C1} @25°C (A)	I_{C2} @90°C (A)	t_f IND@125°C (ns)	P_D (W)	Part Number	Package Type
LOW CONDUCTION LOSS FAMILY							
1000	2.800	65.0	35	1500	260	BFJ17	TO-247
	3.000	45.0	25	1500	200	BFJ16	TO-247
	3.000	30.0	17	1500	147	BFJ15	TO-247
600	2.300	75.0	40	1000	260	BFJ12	TO-247
	2.500	50.0	30	1000	200	BFJ11	TO-247
	2.500	35.0	20	1000	147	BFJ10	TO-247
FAST SWITCHING FAMILY							
1000	3.700	50.0	35	800	260	BFJ27	TO-247
	4.000	40.0	25	800	200	BFJ26	TO-247
	4.000	25.0	17	800	147	BFJ25	TO-247
600	3.000	55.0	40	500	260	BFJ22	TO-247
	3.000	45.0	30	500	200	BFJ21	TO-247
	3.000	30.0	20	600	147	BFJ20	TO-247