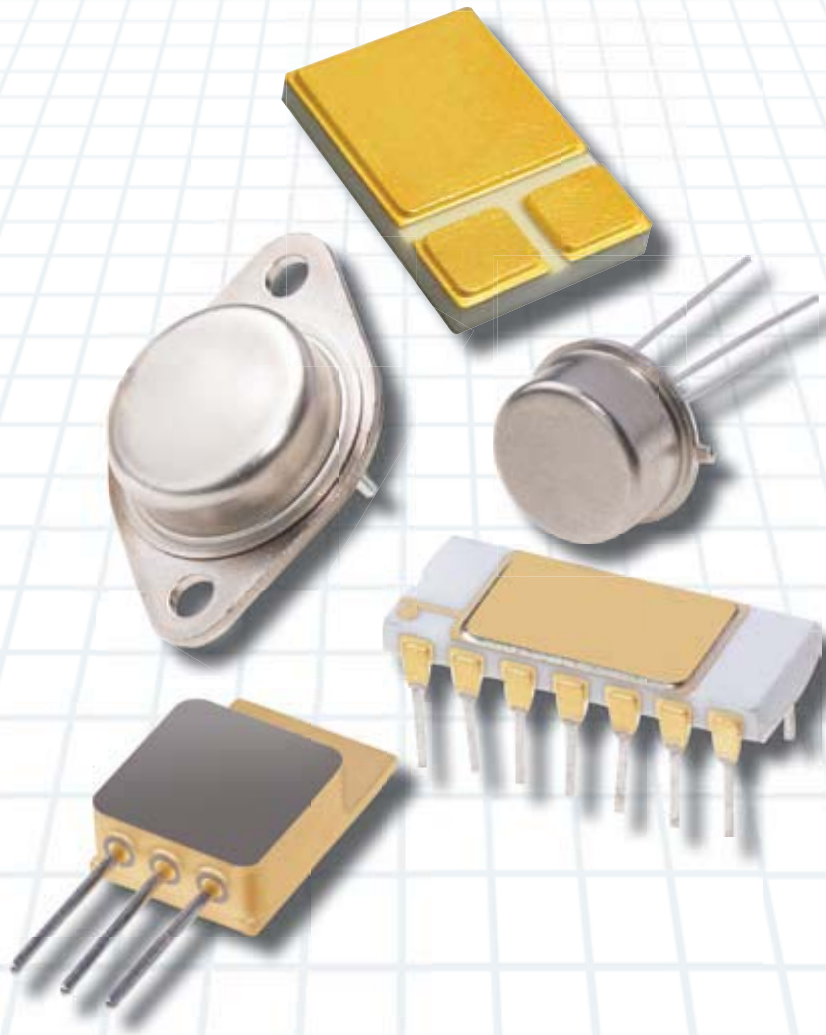


HIGH RELIABILITY POWER MOSFETS



Microsemi High Reliability Semiconductor Products



Microsemi is a world leader in military and commercial aerospace semiconductors and modules. Our military/aerospace history spans nearly a half century, to the earliest days of the company, serving virtually every major manufacturer in the industry.

Typical defense and commercial aircraft system applications include motor controls for wings, flaps, fuel pumps, generators, radar switching, fire control, avionics and flight control.

Aerospace/satellite system applications include battery protection and bypass, charge and discharge, solar array shunt, booster nacelles, docking systems and power distribution units.

Now Microsemi is adding a line of power MOSFETs in hermetic packaging to further support the needs of our many high reliability customers. Check the Microsemi website for the latest information on our growing portfolio of high reliability power MOSFETs: <http://www.microsemi.com>.

High Reliability Power MOSFETs

TO-39 205AF (TO-39)

Part Number	Cross	Channel	BVDSS MIN	VGS MAX	RDS(on) MAX	ID MAX	PD MAX	MIL-PRF- 19500 Spec.
			V	V	mΩ	A	W	
IRFF110	2N6782	N	100	±20	600	3.5	15	N/A
IRFF120	2N6788	N	100	±20	300	6	20	N/A
IRFF130	2N6796	N	100	±20	180	8	25	N/A
IRFF210	2N6784	N	200	±20	1500	2.25	15	N/A
IRFF220	2N6790	N	200	±20	800	3.5	20	N/A
IRFF230	2N6798	N	200	±20	400	5.5	25	N/A
IRFF330	2N6800	N	400	±20	1000	3	25	N/A
IRFF430	2N6802	N	500	±20	1500	2.5	25	N/A
IRFF9130	2N6849	P	-100	±20	300	6.5	25	N/A
JANTX2N6782	IRFF110	N	100	±20	600	3.5	15	/556
JANTXV2N6782	IRFF110	N	100	±20	600	3.5	15	/556
JANTX2N6788	IRFF120	N	100	±20	300	6	20	/555
JANTXV2N6788	IRFF120	N	100	±20	300	6	20	/555
JANTX2N6796	IRFF130	N	100	±20	180	8	25	/557
JANTXV2N6796	IRFF130	N	100	±20	180	8	25	/557
JANTX2N6784	IRFF210	N	200	±20	1500	2.25	15	/556
JANTXV2N6784	IRFF210	N	200	±20	1500	2.25	15	/556
JANTX2N6790*	IRFF220	N	200	±20	800	3.5	20	/555
JANTXV2N6790*	IRFF220	N	200	±20	800	3.5	20	/555
JANTX2N6798	IRFF230	N	200	±20	400	5.5	25	/557
JANTXV2N6798	IRFF230	N	200	±20	400	5.5	25	/557
JANTX2N6800	IRFF330	N	400	±20	1000	3	25	/557
JANTXV2N6800	IRFF330	N	400	±20	1000	3	25	/557
JANTX2N6802	IRFF430	N	500	±20	1500	2.5	25	/557
JANTXV2N6802	IRFF430	N	500	±20	1500	2.5	25	/557
JANTX2N6849	IRFF9130	P	-100	±20	300	6.5	25	/564
JANTXV2N6849	IRFF9130	P	-100	±20	300	6.5	25	/564
JANS2N6849	IRFF9130	P	-100	±20	300	6.5	25	/564
JANTX2N6901*	2N6901	N	100	±10	1400	1.7	8.33	/570
JANTXV2N6901*	2N6901	N	100	±10	1400	1.7	8.33	/570

TO-204AA (TO-3 with 40 mil pins)

Part Number	Cross	Channel	BVDSS MIN	VGS MAX	RDS(on) MAX	ID MAX	PD MAX	MIL-PRF- 19500 Spec.
			V	V	mΩ	A	W	
IRF130	2N6756	N	100	±20	180	14	75	N/A
IRF230	2N6758	N	200	±20	400	9	75	N/A
IRF330	2N6760	N	400	±20	1000	5.5	75	N/A
IRF350	2N6768	N	400	±20	300	14	150	N/A
IRF430	2N6762	N	500	±20	1500	4.5	75	N/A
IRF450	2N6770	N	500	±20	400	12	150	N/A
IRF9130	2N6804	P	-100	±20	300	-11	75	N/A
2N6904	2N6904	N	200	±10	600	8	75	N/A
JANTX2N6756	IRF130	N	100	±20	180	14	75	/542
JANTXV2N6756	IRF130	N	100	±20	180	14	75	/542
JANTX2N6758	IRF230	N	200	±20	400	9	75	/542
JANTXV2N6758	IRF230	N	200	±20	400	9	75	/542
JANTX2N6904	2N6904	N	200	±10	600	8	75	/566
JANTXV2N6904	2N6904	N	200	±10	600	8	75	/566
JANTX2N6760	IRF330	N	400	±20	1000	5.5	75	/542
JANTXV2N6760	IRF330	N	400	±20	1000	5.5	75	/542
JANTX2N6768	IRF350	N	400	±20	300	14	150	/543
JANTXV2N6768	IRF350	N	400	±20	300	14	150	/543
JANTX2N6762	IRF430	N	500	±20	1500	4.5	75	/542
JANTXV2N6762	IRF430	N	500	±20	1500	4.5	75	/542
JANTX2N6770	IRF450	N	500	±20	400	12	150	/543
JANTXV2N6770	IRF450	N	500	±20	400	12	150	/543
JANTX2N6804	IRF9130	P	-100	±20	300	-11	75	/562
JANTXV2N6804	IRF9130	P	-100	±20	300	-11	75	/562

* Mil qualification in progress

s in Hermetic Packages

18-Pin LCC (Surface Mount)

Part Number	Cross	Channel	BVDSS MIN	VGS MAX	RDS(on) MAX	ID MAX	PD MAX	MIL-PRF- 19500 Spec.
			V	V	mΩ	A	W	
IRFE110	2N6782U	N	100	±20	600	3.5	15	N/A
IRFE120	2N6788U	N	100	±20	300	6.0	14	N/A
IRFE130	2N6796U	N	100	±20	180	8.0	25	N/A
IRFE210	2N6784U	N	200	±20	1500	2.3	15	N/A
IRFE220	2N6790U	N	200	±20	800	3.5	14	N/A
IRFE230	2N6798U	N	200	±20	400	5.5	25	N/A
IRFE330	2N6800U	N	400	±20	1000	3.0	25	N/A
IRFE430	2N6802U	N	500	±20	1500	2.5	25	N/A
IRFE9130	2N6849U	P	-100	±20	300	-6.5	25	N/A
JANTX2N6782U	IRFE110	N	100	±20	600	3.5	15	/556
JANTXV2N6782U	IRFE110	N	100	±20	600	3.5	15	/556
JANTX2N6788U	IRFE120	N	100	±20	300	6.0	14	/555
JANTXV2N6788U	IRFE120	N	100	±20	300	6.0	14	/555
JANTXV2N6796U	IRFE130	N	100	±20	180	8.0	25	/557
JANTXV2N6796U	IRFE130	N	100	±20	180	8.0	25	/557
JANTX2N6784U	IRFE210	N	200	±20	1500	2.3	15	/556
JANTXV2N6784U	IRFE210	N	200	±20	1500	2.3	15	/556
JANTX2N6790U*	IRFE220	N	200	±20	800	3.5	14	/555
JANTXV2N6790U*	IRFE220	N	200	±20	800	3.5	14	/555
JANTX2N6798U	IRFE230	N	200	±20	400	5.5	25	/557
JANTXV2N6798U	IRFE230	N	200	±20	400	5.5	25	/557
JANTX2N6800U	IRFE330	N	400	±20	1000	3.0	25	/557
JANTXV2N6800U	IRFE330	N	400	±20	1000	3.0	25	/557
JANTX2N6802U	IRFE430	N	500	±20	1500	2.5	25	/557
JANTXV2N6802U	IRFE430	N	500	±20	1500	2.5	25	/557
JANTX2N6849U	IRFE9130	P	-100	±20	300	-6.5	25	/564
JANTXV2N6849U	IRFE9130	P	-100	±20	300	-6.5	25	/564
JANS2N6849	IRFE9130	P	-100	±20	300	-6.5	25	/564

SMD-1 (Surface Mount)

Part Number	Cross	Channel	BVDSS MIN	VGS MAX	RDS(on) MAX	ID MAX	PD MAX	MIL-PRF- 19500 Spec.
			V	V	mΩ	A	W	
IRFN150	2N7224U	N	100	±20	70	34.0	150	N/A
IRFN250	2N7225U	N	200	±20	100	27.4	150	N/A
IRFN350	2N7227U	N	400	±20	315	14.0	150	N/A
IRFN450	2N7228U	N	500	±20	415	12.0	150	N/A
IRFN9140	2N7636U	P	-100	±20	200	-18.0	125	N/A
JANTX2N7224U	IRFN150	N	100	±20	70	34.0	150	/592
JANTXV2N7224U	IRFN150	N	100	±20	70	34.0	150	/592
JANTX2N7225U	IRFN250	N	200	±20	100	27.4	150	/592
JANTXV2N7225U	IRFN250	N	200	±20	100	27.4	150	/592
JANTX2N7227U	IRFN350	N	400	±20	315	14.0	150	/592
JANTXV2N7227U	IRFN350	N	400	±20	315	14.0	150	/592
JANTX2N7228U	IRFN450	N	500	±20	415	12.0	150	/592
JANTXV2N7228U	IRFN450	N	500	±20	415	12.0	150	/592
JANTX2N7236U	IRFN9140	P	-100	±20	200	-18.0	125	/595
JANTXV2N7236U	IRFN9140	P	-100	±20	200	-18.0	125	/595

* Mil qualification in progress

TO-254AA

Part Number	Cross	Channel	BVDSS MIN	VGS MAX	RDS(on) MAX	ID MAX	PD MAX	MIL-PRF- 19500 Spec.
			V	V	mΩ	A	W	
IRF150	2N6764T1	N	100	±20	55	38	150	N/A
IRF250	2N6766T1	N	200	±20	85	30	150	N/A
IRF350	2N6768T1	N	400	±20	300	14	150	N/A
IRF450	2N6770T1	N	500	±20	400	12	150	N/A
IRFM150	2N7224	N	100V	±20	70	34.0A	150W	N/A
IRFM250	2N7225	N	200V	±20	100	27.4A	150W	N/A
IRFM350	2N7227	N	400V	±20	315	14.0A	150W	N/A
IRFM450	2N7228	N	500V	±20	415	12.0A	150W	N/A
IRFM9140	2N7236	P	-100V	±20	200	-18.0A	125W	N/A
JANTX2N6764T1	IRF150	N	100	±20	55	38	150	/543
JANTXV2N6764T1	IRF150	N	100	±20	55	38	150	/543
JANTX2N6766T1	IRF250	N	200	±20	85	30	150	/543
JANTXV2N6766T1	IRF250	N	200	±20	85	30	150	/543
JANTX2N6768T1	IRF350	N	400	±20	300	14	150	/543
JANTXV2N6768T1	IRF350	N	400	±20	300	14	150	/543
JANTX2N6770T1	IRF450	N	500	±20	400	12	150	/543
JANTXV2N6770T1	IRF450	N	500	±20	400	12	150	/543
JANTX2N7224	IRFM150	N	100V	±20	70	34.0A	150W	/592
JANTXV2N7224	IRFM150	N	100V	±20	70	34.0A	150W	/592
JANTX2N7225	IRFM250	N	200V	±20	100	27.4A	150W	/592
JANTXV2N7225	IRFM250	N	200V	±20	100	27.4A	150W	/592
JANTX2N7227	IRFM350	N	400V	±20	315	14.0A	150W	/592
JANTXV2N7227	IRFM350	N	400V	±20	315	14.0A	150W	/592
JANTX2N7228	IRFM450	N	500V	±20	415	12.0A	150W	/592
JANTXV2N7228	IRFM450	N	500V	±20	415	12.0A	150W	/592
JANTX2N7236	IRFM9140	P	-100V	±20	200	-18.0A	125W	/595
JANTXV2N7236	IRFM9140	P	-100V	±20	200	-18.0A	125W	/595

TO-204AE (TO-3 with 60 mil pins)

Part Number	Cross	Channel	BVDSS MIN	VGS MAX	RDS(on) MAX	ID MAX	PD MAX	MIL-PRF- 19500 Spec.
			V	V	mΩ	A	W	
IRF150	2N6764	N	100	±20	55	38	150	N/A
IRF250	2N6766	N	200	±20	85	30	150	N/A
JANTX2N6764	IRF150	N	100	±20	55	38	150	/543
JANTXV2N6764	IRF150	N	100	±20	55	38	150	/543
JANTX2N6766	IRF250	N	200	±20	85	30	150	/543
JANTXV2N6766	IRF250	N	200	±20	85	30	150	/543
JANTX2N6898	2N6798	P	-100	±20	200	-25	150	/565
JANTXV2N6898	2N6798	P	-100	±20	200	-25	150	/565

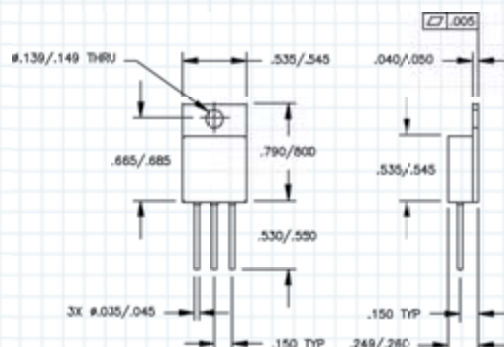
MO-036AB N-Channel Quad MOSFETs

Part Number	Cross	Channel	BVDSS MIN	VGS MAX	RDS(on) MAX	ID MAX	PD MAX	MIL-PRF- 19500 Spec.
			V	V	mΩ	A	W	
IRFG110	2N7334	N	100V	±20	700	1.0A	1.4W	N/A
IRFG9110	2N7335	P	-100	±20	1400	-0.75	1.4W	N/A
JANTX2N7334*	IRFG110	N	100V	±20	700	1.0A	1.4W	/597
JANTXV2N7334*	IRFG110	N	100V	±20	700	1.0A	1.4W	/597
JANTX2N7335*	IRFG9110	P	-100	±20	1400	-0.75	1.4W	/599
JANTXV2N7335*	IRFG9110	P	-100	±20	1400	-0.75	1.4W	/599

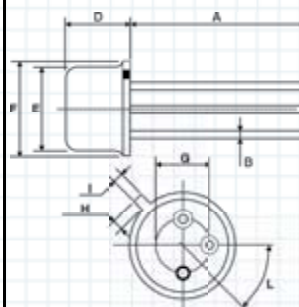
* Mil qualification in progress

Packages & Dimensions

TO-254AA

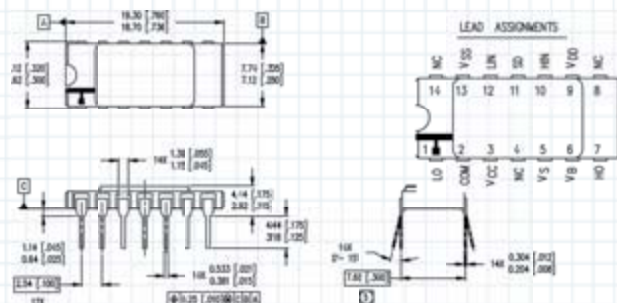


TO-39

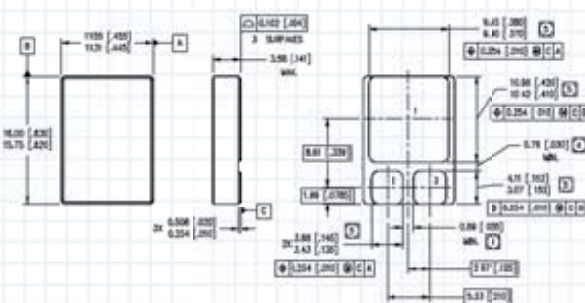


DIMENSIONS						
REF.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A	12.70			0.500		
B			0.49			0.019
D			6.60			0.260
E			8.50			0.334
F			9.40			0.370
G	5.08			0.200		
H			1.20			0.047
I			0.90			0.035
L	45°C (TYP.)					

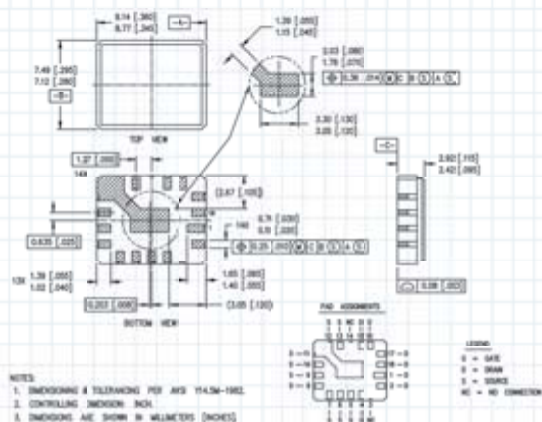
MO-036AB



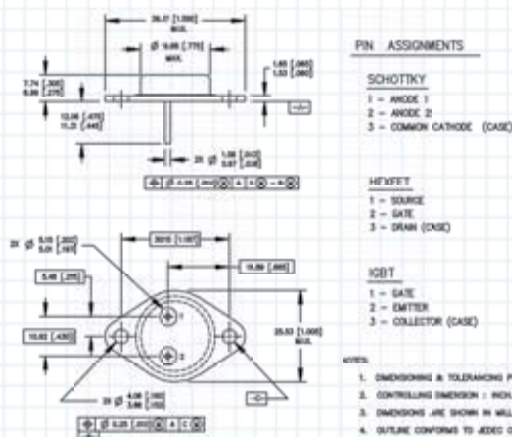
SMD-1



18-Pin LCC



TO-204AA (TO-204AE has 60 mil pin)



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