

**DIODE**

**1. GENERAL PURPOSE & SWITCHING**

DEVICE	SPEC V <sub>RM</sub> (V)	I <sub>FM</sub> (mA)	I <sub>O</sub> (mA)	P (mW)	T <sub>j</sub> (°C)	V <sub>F</sub>		I <sub>R</sub>		C <sub>T</sub> f = 1MHz		t <sub>rr</sub> (ns)	PACKAGE	
						MAX (V)	I <sub>F</sub> (mA)	MAX (uA)	V <sub>R</sub> (V)	MAX (PF)	VR (V)			
KDS 1553	70	300	100	300	150	1.4	-100	0.5	50	3.5	0	4	V <sub>R</sub> = 6V RL = 100Ω I <sub>F</sub> = 10mA	DO-35
KDS 1554	55													
KDS 1555	35													
IN 4148	75	225	75	500	175	1.0	10	0.025	20	4.0	0	4		

**2. TEMPERATURE & BIAS COMPENSATION**

DEVICE	SPEC V <sub>R</sub> (V)	I <sub>FM</sub> (mA)	I <sub>FAV</sub> (mA)	T <sub>j</sub> (°C)	V <sub>F</sub>				I <sub>R</sub>		V <sub>F</sub>		PACKAGE
					MIN (V)	TYP (V)	MAX (V)	I <sub>F</sub> (mA)	MAX (uA)	V <sub>R</sub> (V)	TYP mV/°C	I <sub>F</sub> (mA)	
KDS 8513A-0	5	150	50	150	0.63	0.65	0.68	3	10	5	-2.0	1	DO-35

**3. AFC FOR FM RECEIVER**

DEVICE	SPEC V <sub>R</sub> (V)	T <sub>j</sub> (°C)	I <sub>R</sub>		C <sub>r</sub>				K		Q f=50MHz		PACKAGE
			MAX (uA)	V <sub>R</sub> (V)	MIN (PF)	MAX (PF)	V <sub>R</sub> (V)	f (MHz)	MIN	MAX	TYP	V <sub>r</sub> (V)	
KDS 2236	15	150	100	4	7	14	4	1	0.21	0.50	120	4	DO-35

$$K = \frac{C_r(V_R = 2V) - C_r(V_R = 4V)}{C_r(V_R = 4V)} \text{ at } f = 1\text{MHz}$$

**4. GENERAL PURPOSE RECTIFIER**

DEVICE	SPEC V <sub>RM</sub> (V)	V <sub>RSM</sub> (V)	I <sub>O</sub> (A)	I <sub>SURGE</sub> (A)	T <sub>j</sub> (°C)	T <sub>stg</sub> (°C)	V <sub>F</sub>		I <sub>R</sub>		PACKAGE
							MAX (V)	I <sub>F</sub> (A)	MAX (uA)	V <sub>RM</sub> (V)	
IN 4001	50	100	1	50	175	-65-175	1.1	1	10	RATED	DO-41
IN 4002	100	200		50							
IN 4003	200	300		50							
IN 4004	400	500		50							
IN 4005	600	750		30							
IN 4006	800	1000		30							
IN 4007	1000	1200		30							

5. FAST RECOVERY RECTIFIER

SPEC DEVICE	V <sub>RRM</sub> (V)	T <sub>j</sub> (°C)	T <sub>stg</sub> (°C)	I <sub>O</sub> (A)	I <sub>F</sub> @ V <sub>F</sub> (A)	MAX		I <sub>R</sub> (μA)	MAX		t <sub>rr</sub> (ns)	PACKAGE
						V <sub>F</sub> (V)	I <sub>F</sub> (A)		@V <sub>RRM</sub>	@		
KDR 812	200	150	-40~150	1	at RATED  T <sub>amb</sub> 75°C	1	1	1	at RATED	300		F-126
KDR 814	400											
KDR 816	600											
KDR 818	1000											

6. ZENER DIODE

SYMBOL	V <sub>ZT</sub>			I <sub>ZT</sub>	I <sub>ZK</sub>	I <sub>R</sub>	@ V <sub>R</sub>	α V <sub>Z</sub>	I <sub>ZM</sub>	P <sub>tot</sub>	T <sub>j</sub>	PACKAGE
	Zener Voltage @ I <sub>ZT</sub> = 5 mA			Maximum Zener Impedance @ I <sub>ZT</sub> = 5 mA	Maximum Zener Knee Impedance @ I <sub>ZK</sub> = 1 mA	Reverse Current @ V <sub>R</sub> T <sub>amb</sub> 25°C	Reverse Voltage	Typical Temperature Coefficient 05 V <sub>ZT</sub>	Maximum Zener Current	Allowable Power Dissipation	Junction Tempe- rature	
UNIT	V			Ω	Ω	μA	V	%/°C	mA	mw	°C	
LIMITS DEVICE	MIN	TYP	MAX	MAX	MAX	MAX	MAX	TYP	MAX	MAX	MAX	
BZX83-C4V7	4.4	4.7	5.0	80	600	2	1	-0.01	85	500	75	DO-35
BZX83-C5V6	5.2	5.6	6.0	40	450	1	1	0.03	70			
BZX83-C6V2	5.8	6.2	6.6	10	200	1	2	0.04	64			
BZX83-C7V5	7.0	7.5	7.9	7	50	1	3.5	0.05	53			
BZX83-C8V2	7.7	8.2	8.7	7	50	1	4	0.06	47			
BZX83-C9V1	8.5	9.1	9.6	10	50	1	5	0.06	43			
BZX83-C10	9.4	10	10.6	15	70	1	6	0.07	40			

7. GERMANIUM TUNGSTEN DIODE

(AM/FM DETECTOR)

SPEC DEVICE	USE	V <sub>RM</sub> (V)	I <sub>FM</sub> (mA)	I <sub>FS</sub> (mA)	I <sub>O</sub> (mA)	I <sub>F</sub> (mA)	MIN		I <sub>R</sub> (μA)	MAX		C <sub>j</sub> (PF)	TYP @ f (MHz)	PACKAGE
							@V <sub>F</sub> (V)	@V <sub>R</sub> (V)						
IN 60 M	AM	-24	70	200	20	3	1	100	-10	0.8	1	DO-7		
IN 60 S	FM	-45	70	500	50	4	1	75	-10	0.8	1	DO-7		

DIMENSION

T-91-20



