





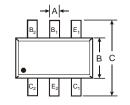
DUAL PNP SMALL SIGNAL SURFACE MOUNT TRANSISTOR

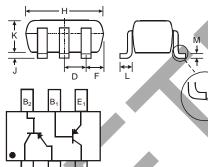
Features

- **Epitaxial Planar Die Construction**
- Complementary NPN Type Available (IMX8)
- Small Surface Mount Package
- Lead Free/RoHS Compliant (Note 3)
- "Green" Device, Note 4 and 5

Mechanical Data

- Case: SOT-26
- Case Material: Molded Plastic, "Green" Molding Compound, Note 5. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminal Connections: See Diagram
- Terminals: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Copper leadframe).
- Marking Information: KX7 See Page 3
- Ordering & Date Code Information: See Page 3
- Weight: 0.016 grams (approximate)





	SOT-26										
Dim	Min	Max	Тур								
Α	0.35	0.50	0.38								
В	1.50	1.70	1.60								
C	2.70	3.00	2.80								
D	_	_	0.95								
F	_	_	0.55								
Н	2.90	3.10	3.00								
J	0.013	0.10	0.05								
K	1.00	1.30	1.10								
4	0.35	0.55	0.40								
M	0.10	0.20	0.15								
α	0°	8°	_								
All Dimensions in mm											

Maximum Ratings @T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-120	V
Collector-Emitter Voltage	V _{CEO}	-120	V
Emitter-Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	lc	-50	mA
Power Dissipation (Note 1)	P _d	225	mW
Thermal Resistance, Junction to Ambient (Note 1)	$R_{ hetaJA}$	555	°C/W
Operating and Storage Temperature Range	T_j , T_{STG}	-55 to +150	°C

Electrical Characteristics @TA = 25°C unless otherwise specified

Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition			
OFF CHARACTERISTICS (Note 2)									
Collector-Base Breakdown Voltage	V _{(BR)CBO}	-120	l		V	$I_C = -50\mu A$			
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	-120			V	$I_C = -1.0 \text{mA}$			
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	-5.0	l		V	$I_E = -50\mu A$			
Collector Cutoff Current	I _{CBO}	_		-0.5	μΑ	V _{CB} = -100V			
Emitter Cutoff Current	I _{EBO}	_		-0.5	μΑ	$V_{EB} = -4.0V$			
ON CHARACTERISTICS (Note 2)									
DC Current Gain	h _{FE}	180		820		$I_C = -2.0 \text{mA}, V_{CE} = -6.0 \text{V}$			
Collector-Emitter Saturation Voltage	V _{CE(SAT)}			-0.5	V	$I_C = -10 \text{mA}, I_B = -1.0 \text{mA}$			
SMALL SIGNAL CHARACTERISTICS									
Current Gain-Bandwidth Product	f⊤	_	140	_	MHz	V _{CE} = -12V, I _C = -2.0mA, f = 100MHz			

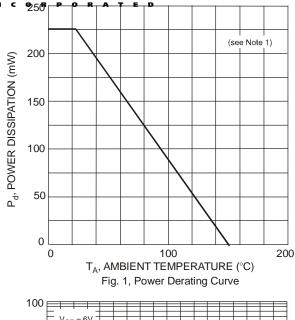
Notes:

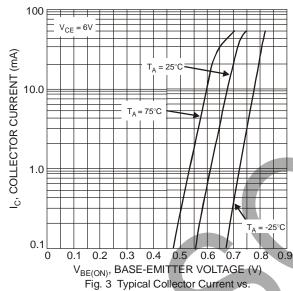
- Device mounted on FR-5 PCB 1.0 x 0.75 x 0.062 inch pad layout as shown on Diodes Inc. suggested pad layout AP02001, which can be found on our website at http://www.diodes.com/datasheets/ap02001.pdf. 200mW per element must not be exceeded.
- Short duration pulse test used to minimize self-heating effect.
- No purposefully added lead.
- Diodes Inc.'s "Green" policy can be found on our website at http://www.diodes.com/products/lead_free/index.php.
- Product manufactured with Date Code 0627 (week 27, 2006) and newer are built with Green Molding Compound. Product manufactured prior to Date Code 0627 are built with Non-Green Molding Compound and may contain Halogens or Sb2O3 Fire Retardants.

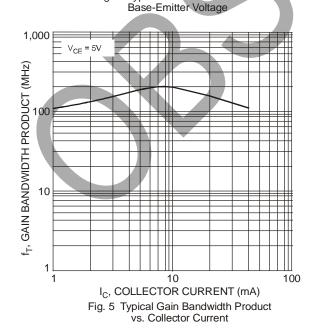
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DECOES

PART OBSOLETE - USE DMMT5401







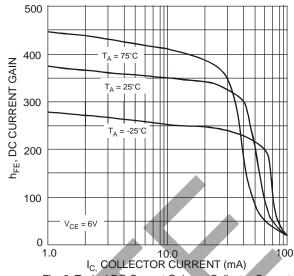


Fig. 2 Typical DC Current Gain vs. Collector Current

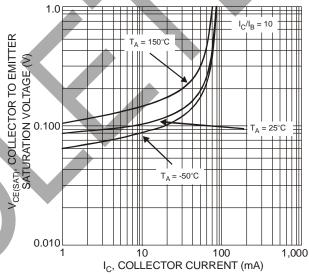
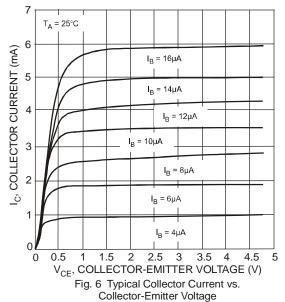


Fig. 4 Typical Collector-Emitter Voltage vs. Collector Current





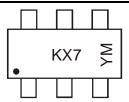
PART OBSOLETE - USE DMMT5401

Ordering Information (Note 5 & 6)

Device	Packaging	Shipping
IMT4-7-F	SOT-26	3000/Tape & Reel

6. For packaging details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

Marking Information



KX7 = Product Type Marking Code YM = Date Code Marking Y =Year ex: T = 2006 M = Month ex: 9 = September YM = Date Code Marking

Date Code Key

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Code	N	Р	R	S	Т	J	V	W	X	Y	Z

								40000000000			
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O N	D

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