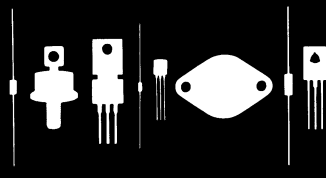


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PMD10K SERIES (NPN)
PMD11K SERIES (PNP)

SILICON POWER
DARLINGTON TRANSISTORS

JEDEC TO-3 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR PMD10K/PMD11K series types are silicon NPN/PNP darlington power transistors manufactured by the epitaxial-base process, mounted in a hermetically sealed metal package, and designed for power switching applications. These devices are designed to be electrical/mechanical equivalents to Lambda part numbers.

MAXIMUM RATINGS (T_C=25°C)

	SYMBOL	PMD10K60 PMD11K60	PMD10K80 PMD11K80	PMD10K100 PMD11K100	UNIT
Collector-Base Voltage	V _{CB0}	60	80	100	V
Collector-Emitter Voltage	V _{CE0}	60	80	100	V
Emitter-Base Voltage	V _{EB0}	5.0	5.0	5.0	V
Collector Current	I _C	12	12	12	A
Collector Current (Peak)	I _{CM}	20	20	20	A
Base Current	I _B	0.2	0.2	0.2	A
Power Dissipation	P _D	150	150	150	W
Operating and Storage Junction Temperature	T _J , T _{STG}	-65 TO +200			°C
Thermal Resistance	θ _{JC}	1.17			°C/W

ELECTRICAL CHARACTERISTICS (T_C=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I _{CER}	V _{CE} =Rated V _{CE0} , R _{BE} =1.0KΩ		1.0	mA
I _{CER}	V _{CE} =Rated V _{CE0} , R _{BE} =1.0KΩ, T _C =150°C		5.0	mA
I _{EB0}	V _{EB} =5.0V		2.0	mA
BV _{CE0}	I _C =100mA (PMD10K60, PMD11K60)	60		V
BV _{CE0}	I _C =100mA (PMD10K80, PMD11K80)	80		V
BV _{CE0}	I _C =100mA (PMD10K100, PMD11K100)	100		V
V _{CE(SAT)}	I _C =6.0A, I _B =24mA		2.0	V
V _{BE(SAT)}	I _C =6.0A, I _B =24mA		2.8	V
V _{BE(ON)}	V _{CE} =3.0V, I _C =6.0A		2.8	V
h _{FE} (PMD10K series)	V _{CE} =3.0V, I _C =6.0A	1000	20,000	
h _{FE} (PMD11K series)	V _{CE} =3.0V, I _C =6.0A	800	20,000	
h _{fe}	V _{CE} =3.0V, I _C =5.0A, f=1.0kHz	300	-	
f _T	V _{CE} =3.0V, I _C =5.0A, f=1.0MHz	4.0		MHz
C _{ob}	V _{CB} =10V, I _E =0, f=1.0MHz		300	pF