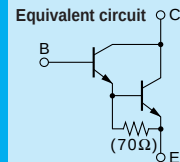


2SD2389



Silicon NPN Triple Diffused Planar Transistor (Complement to type 2SB1559)

Application : Audio, Series Regulator and General Purpose

■ **Absolute maximum ratings** (Ta=25°C)

Symbol	2SD2389	Unit
VCBO	160	V
VEBO	150	V
VEBO	5	V
IC	8	A
IB	1	A
PC	80(Tc=25°C)	W
Tj	150	°C
Tstg	-55 to +150	°C

■ **Electrical Characteristics** (Ta=25°C)

Symbol	Conditions	2SD2389	Unit
ICBO	V _{CB} =160V	100max	μA
IEBO	V _{EB} =5V	100max	μA
V _{(BR)CEO}	I _C =30mA	150min	V
h _{FE}	V _{CE} =4V, I _C =6A	5000min*	
V _{CE(sat)}	I _C =6A, I _B =6mA	2.5max	V
V _{BE(sat)}	I _C =6A, I _B =6mA	3.0max	V
f _T	V _{CE} =12V, I _E =-1A	80typ	MHz
C _{OB}	V _{CB} =10V, f=1MHz	85typ	pF

*h_{FE} Rank $\bar{O}$ (5000 to 12000), $\bar{P}$ (6500 to 20000), $\bar{Y}$ (15000 to 30000)

■ Typical Switching Characteristics (Common Emitter)

VCC (V)	R _L (Ω)	I _C (A)	V _{BB1} (V)	V _{BB2} (V)	I _{B1} (mA)	I _{B2} (mA)	t _{on} (μs)	t _{stg} (μs)	t _f (μs)
60	10	6	10	-5	6	-6	0.6typ	10.0typ	0.9typ

External Dimensions MT-100(TO3P)

